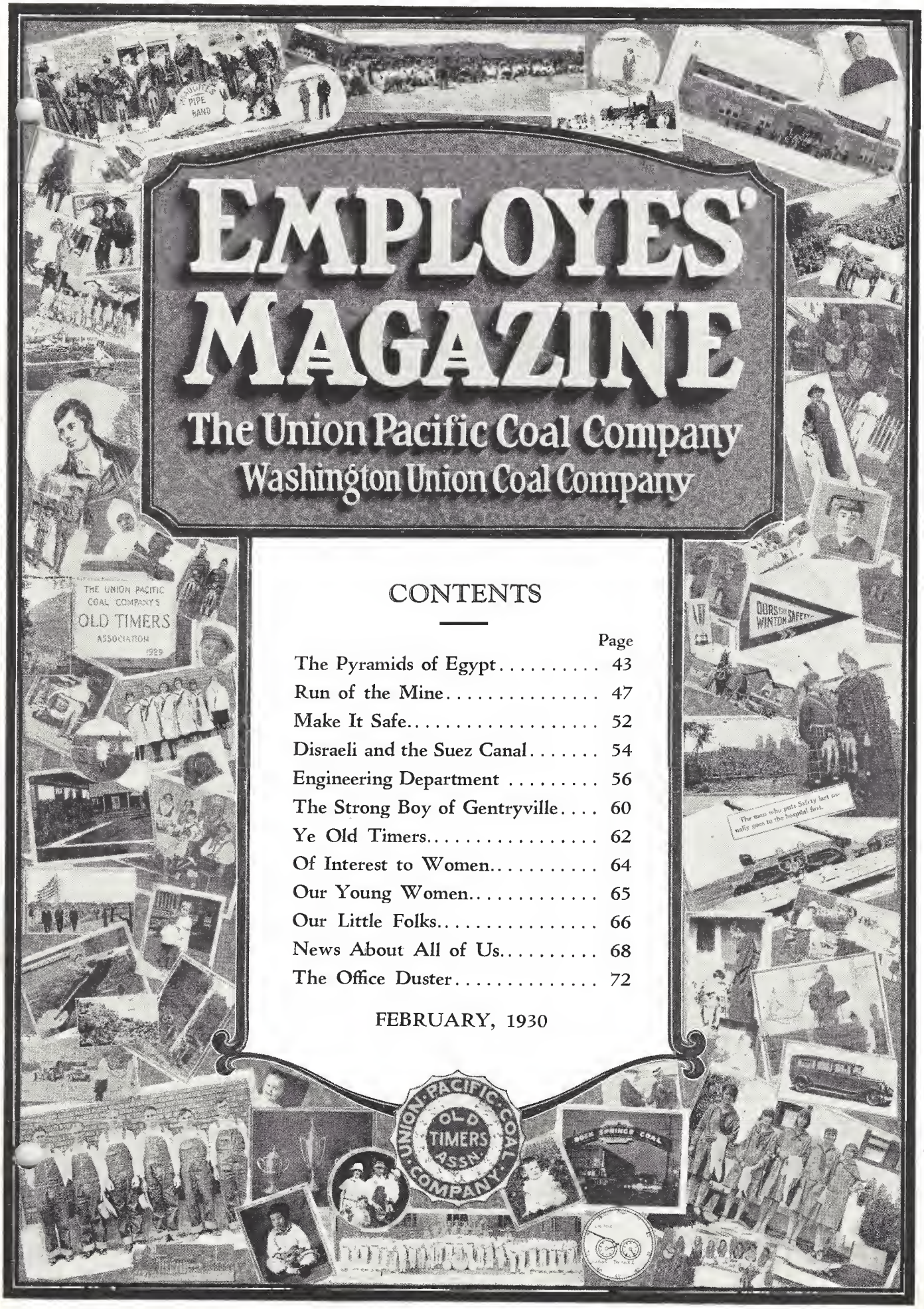

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FEBRUARY, 1930

(*Courtesy of Chicago Art Institute*)

Pyramid of Cheops—
the Great Pyramid at Gizeh

EMPLOYES' MAGAZINE

THE UNION PACIFIC COAL COMPANY

WASHINGTON UNION COAL COMPANY

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The Pyramids of Egypt

Built 4000 B. C.

By JESSIE McDIARMID

Those mighty piles—the Pyramids—have over-lived
The feeble generations of mankind,
What though unmoved they bore the deluge weight,
Survivors of the ruined world?
What though their founder, filled with miracles,
And wealth miraculous, their ample vaults?

CONQUERORS of time—the changeless pyramids! We borrowed the phrase to describe these, the only remaining of the ancient "Seven Wonders of the World." And we quote from one of the early numbers of the Employes' Magazine, an article by W. W. Jones of The Union Pacific Coal Company's Engineering Staff in which he describes the Great Pyramid, one of these oldest and largest buildings as follows: "The Great Pyramid was built in the period of 4000 B. C. and required the labor of 100,000 men for thirty years to complete it."

There aren't any tremendous or vital reasons why the pyramids of Egypt are important as we now consider values. Now we know that man is himself more important than anything he can build. It is our expressed ideal at least that man may die for an idea, for that which contributes to the final good for humanity—never for the aggrandizement of an individual.

THE SEVEN WONDERS OF THE WORLD

The original seven wonders of the ancient world are: (1) The Pyramids of Egypt and the Sphinx; (2) The Hanging Gardens of Babylon; (3) The Temple of Diana in Asia Minor; (4) The Statue of Jupiter Olympus in Greece; (5) The Mausoleum of Mausolus, King of Caria in Asia Minor; (6) The Pharos of Alexandria in Egypt; and (7) The Colossus of Rhodes on the Island of Rhodes. Of these only the Pyramids and Sphinx remain. Of the others there is scarcely a vestige except traditional tales. Indeed although the "Seven Wonders of the World" are among the traditions of our childhood, few of us could describe them.

But we always have the magic "seven" Wonders. The wonders of the Middle Ages are the Coliseum of Rome, the Catacombs of Alexandria, the Great Wall of China, Stonehenge, The Leaning Tower of Pisa, the Porcelain Tower of Nankin and the Mosque of St. Sophia in Constantinople.

Historically, the pyramids are important. As evidence of the architectural and building achievements of the period, they are mystifying and important. As evidence of the civilization and thinking of the period, they are important. Mystery of the past, enigma of the future, and still the enduring wonder for future ages of this world, they are important. As the tombs of kings by which these same kings hoped to achieve immortal remembrance they "point a moral and adorn a tale" and are important. As projectors of our imagination into the wonders of the ancient world, they are unequalled in interest value—and are important.

We have two chief sources of information about the pyramids and about Egypt of this period, the Holy Bible and the writings of Herodotus, an outstanding Greek historian of the fifth century, B. C. to whom we are also indebted for enormous quantities of information about his own and contempo-

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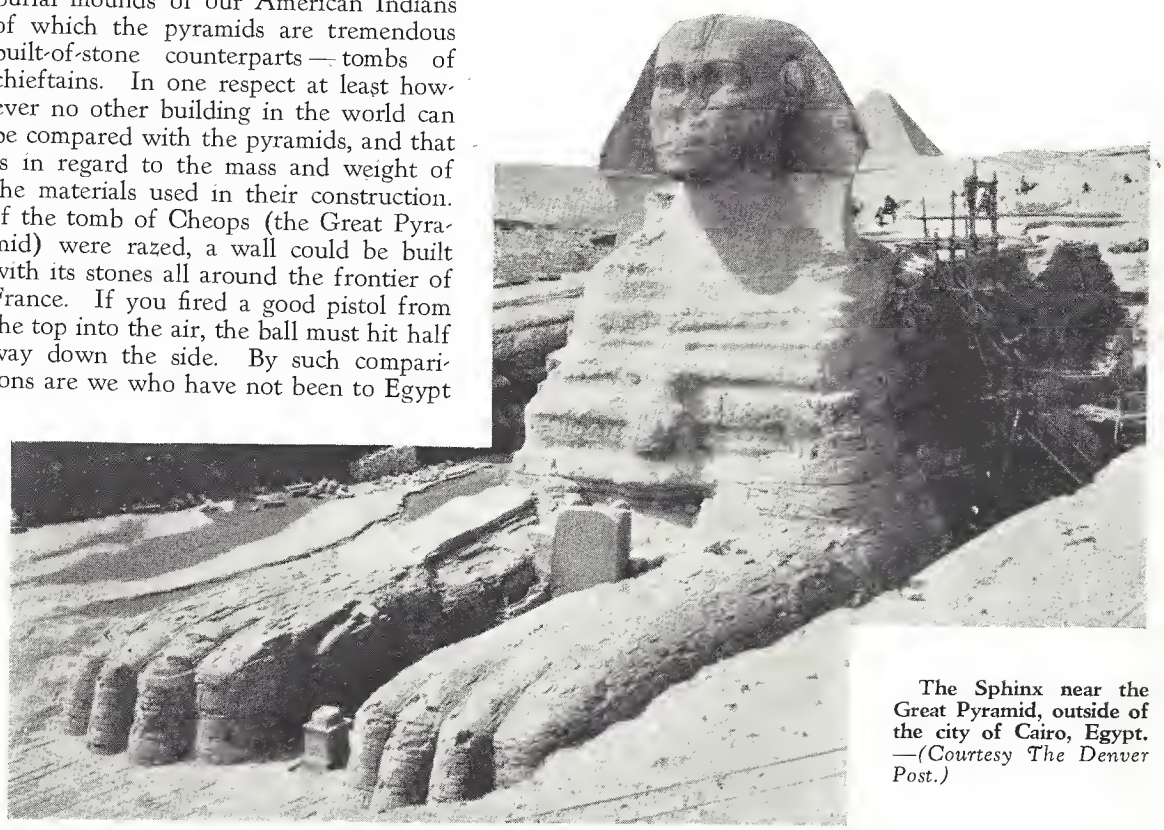
Articles of interest to our readers, photographs and sketches suitable for reproduction, are solicited and should be addressed to Editor, Employes' Magazine, Union Pacific Coal Company, Rock Springs, Wyoming.

Jessie McDiarmid, Editor.

rary history. Herodotus travelled in Egypt and learned all that the priests of that day could tell him. He records that it took thirty years to build the Great Pyramid, the largest of some thirty which remain in the valley of the Nile. Relays of 100,000 men were kept working for three month periods and further thousands would have been needed to provide food for the builders. Thousands, hundreds of thousands of men kept slaving for their working life time—or what would today be a large part of a man's working life time—to build a tomb which should immortalize the memory of their kind!

Few of us may ever travel to Egypt to see the pyramids so it is fair to liken them to the earth burial mounds of our American Indians of which the pyramids are tremendous built-of-stone counterparts — tombs of chieftains. In one respect at least however no other building in the world can be compared with the pyramids, and that is in regard to the mass and weight of the materials used in their construction. If the tomb of Cheops (the Great Pyramid) were razed, a wall could be built with its stones all around the frontier of France. If you fired a good pistol from the top into the air, the ball must hit half way down the side. By such comparisons are we who have not been to Egypt asked to form an idea of the dimensions of the amazing structures.

They were erected during the Fourth Dynasty (3733-3266 B. C.) built by the Kings, as their tombs, to secure the preservation of the body until that time should have passed when, according to their belief in immortality, the soul would once more return to the body. The early pilgrims used to believe that the twelve largest pyramids were the twelve granaries of Joseph; others have thought that they possessed important astronomical qualities; others allege that prophecies of the advent of Christ and other religiously significant material was engraved upon them. But the modern scientific idea and doubtless the true one, is that they were simply the tombs of monarchs. Because they wanted a long life in the next world or because they wished to be existent when their time to be reincarnated came, rich Egyptians left behind sums of money so that their bodies might be made into mummies. We know that these mummies do preserve apparently forever. Then they built tombs to protect their mummified bodies. One of these was excavated a few years ago, disclosing a magnificence so extraordinary that for several years the archaelogical world was agog with interest and the rest of us talked "King Tut," wore King Tut dresses, pins and scarfs, joked about him and produced stage plays about him—an ancient mummified king, Tut-ankh-Amen.

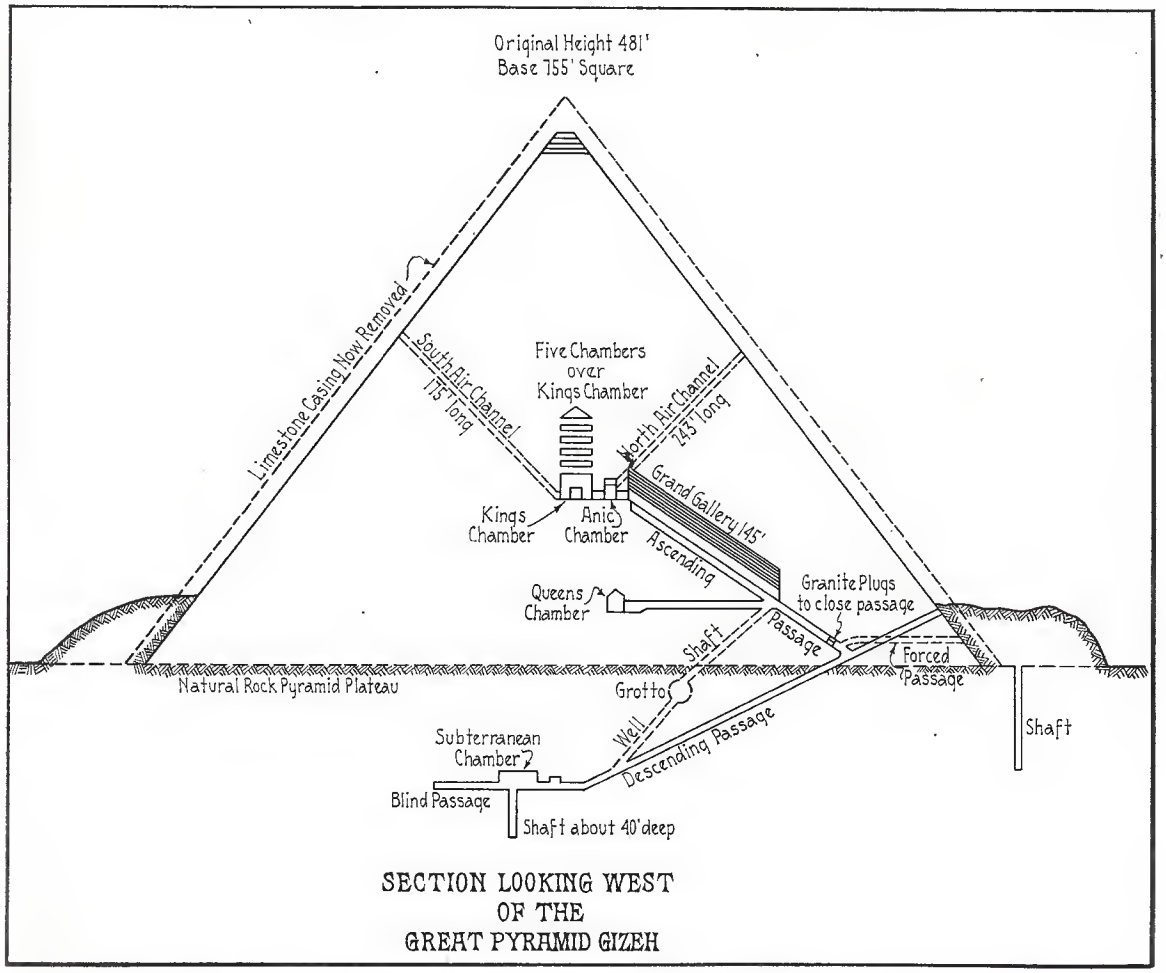


The Sphinx near the Great Pyramid, outside of the city of Cairo, Egypt. *—(Courtesy The Denver Post.)*

Five thousand years ago there lived a king, Khufu, who built the Great Pyramid as his tomb. He started the work early in his reign. He would have to in order to have it completed during his life time. He set his subjects to work at the job. Thousands of them worked in the quarries. Thousands more floated huge blocks of stone down the Nile River. It would seem to have been utter slavery but students of Egyptology seem to agree that while slavery it undoubtedly was, it was not oppression, that an oppressed people would not have sustained such effort. We do however have the Bible account of the oppression of the Israelites and if we are to believe the interpretations of the markings on the tombs, King Cheops died some two hundred years before our account of the Creation. Again, this

would seem to be subject to question because these students tell of Cheops being buried before the Jewish or our Bible account of the creation—and Herodotus, the Greek Historian, tells that the builder of the Great Pyramid was never buried there but was taken to "an island in the Nile River." Perhaps he changed his mind. Perhaps his followers failed to carry out his wishes.

It is impossible to get a picture of the Great Pyramid which adequately displays it. It is thirteen acres in ground extent and in order to see it all the



Arthur Rosatti drew for the Rock Springs' High Scho ol History Department a detail of the Great Pyramid.

than the Gods and where, like other story book heroes, he prevailed against his father's enemies and crafty High Priests, rescuing his father from the captivity in which his enemies held him and finally being himself elected to "learn from Ophet" and prepare to become "Chief Pyramid Builder." In this book is carried as illustration an artist's conception of the pyramid and of the workers, like midgets on its face, and dragging an endless stream of huge blocks of stone to it—aids to imagination.

And some of us may, by means of mathematical

photographer must stand at a great distance. As well try to describe in a single picture the spreading entirety of Elk Mountain and its last two thousand feet of rocky crag. A vigorous use of our imaginations will help some of us. We have just read the boys' story, "The Pyramid Builder" by Francis Rolt Wheeler in which he pictures the boy hero, a son of the king, going about among the workmen who builded; glorying in the "moving river of stone," which he saw making its way from the Nile to the tremendous pyramid, the master achievement of his father's entire kingdom where Truth was greater

computations, arrive at some idea of the enormity of the pyramids and of the engineering feats performed in building them. Certainly the relative return in the higher beauties of art was small compared to the outlay of labor and material.

Except for the chambers and corridors, the Great Pyramid is a solid mass, covering thirteen acres, that is to say, it was in its completed state, with the smooth stone facing in place, 768 feet square and 482 feet high. It is higher than any masonry building of which we have record, except perhaps the spires of Cologne Cathedral which we have re-

cently viewed here. Gigantic sepulchre of a king! Having outlived the flood! It is no wonder the Arabs say of the Pyramids: "Time mocks all things but the pyramids mock time."

The Great Pyramid has a square base and an angle of about fifty degrees. The quantity of stone used in building it is estimated at six millions of tons. Some single stones weigh as much as five tons. It consists of a series of platforms each smaller than the one on which it rests and presenting the appearance of steps, which diminish in length from the top to the bottom. Of these steps there are 203. The horizontal lines of the platforms are perfectly straight, and the stones are cut and fitted to each other with the greatest nicety, and joined by a cement of lime which has little sand in it.

The entrance of the Great Pyramid is on the north face, 47 feet above the base; it is nearly in the center. (See drawing showing burial chambers.) The king's chamber is 37 feet long, 17 feet wide and 20 feet in height, and is the wonder of visitors with its walls of red granite, highly polished, each stone reaching from the floor to the ceiling. The ceiling is formed of nine large slabs of polished granite, extending from wall to wall. A grand gloomy mansion of mystery and wonder, full of unsolved mystery and high conjectures! By means of blind alleys and innocent looking trapdoors attempt would seem to have been made to render any attempt at desecration impossible. Below the King's Chamber is that of the Queen.

Mr. W. J. Stroud of Rock Springs rests his camel near the Sphinx on his way to the base of the Great Pyramid.

Herodotus tells that the stones, immense blocks, were dragged the 1,000 yards from the Nile to the pyramid base by means of a causeway, an upward sloping runway, and that it took ten years to construct this. Ropes were probably used to enable a greater number of men to pull the stones forward and upward, and some form of rolls or skids would help.

The Great Pyramid is only a short camel ride from the city of Cairo and all the describers we have read seem to be almost as much impressed by the guides and pink lemonade as by the pyramids themselves; by the fact that the descendants of the builders of these and other grandeurs live in huts of cane and straw, smeared with Nile mud, are the poorest of the poor. We said that our modern thinking placed man himself far in advance of anything he could build. Thus must we see the folks who are on a horizon, think of man's advance or decay.

Romance lives around these pyramids, carrying us back to the earliest meagre annals of history. Abraham visited Egypt about 1920 B. C. and we have the testimony of the Bible account that Egypt was a flourishing country at that time.

We look at the known facts about the pyramids as recorded by Herodotus, look at the characters of an inscription on the Great Pyramid which the ever-present Arab guide explains, tells how much was spent in furnishing the hordes of men with leeks and onions and food. We learn of the tremendous causeway which had to be built along which to convey the stone. We visualize the most wonderful work of human labor ever devised. Then we may let our imaginations picture for us the 100,000 men working—in the quarries, up and down the Nile, on the plains besides the beloved river of Egypt. And may we not look at the beautiful valley of the Nile away beyond, and picture other tales? What a landscape! The Great Pyramid across the river from Cairo, reached through an avenue of palm trees, with a plateau for a pedestal, the western sky for a "back drop" and the ancient river itself to reflect its unchanging majesty; with Arabs now herding their sheep where once stood the thriving capital, Memphis.

When Abraham first went to Egypt he saw the pyramids which had then been built for many centuries. Near here lived Joseph who ruled the land of Egypt under one of the Pharaohs; away to the left is the fruitful district of Goshen whence Moses led his people forth to the Syrian desert. Somewhere near is the site of the seat of learning where Moses was educated by the Egyptian princess who found him.

Visitors to the Great Pyramid must see the Sphinx some distance to the southeast. The body is that of a crouching lion, the face that of a man. It is hewn of solid rock and antedates the Great Pyramid. It was called the God of the Sun and is awe-inspiring in size. However, we copy a note given by a visitor to Egypt who tells that an American visitor wrote him as follows: "My dear, I have seen the Sphinx; it is the ugliest thing I ever saw, except Tom Jenkins, the druggist." We might like to travel with such a companion. Not the least interesting feature of the descriptions we've read about the Great Pyramid is their variety. These conquerors of time also mock describers and beggar description, conquer language.

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Run of the Mine

A Few Words on Union Management, the Injunction, and Electing Union Officers

THOSE who, in these stirring times, read the various publications that attempt to speak for the men who work in the coal mines, are certainly subjected to serious mental strain. Abuse, criticism, even obscene blackguardism, is the order of the day, and the one time peeve of the Union leaders, the injunction, has ceased to be considered an unholy institution, since the Illinois State Mine Workers Officials resorted to it as a means of disciplining their national organization.

The word coal seems to carry trouble wherever it is used, in Europe as well as in the United States. A few weeks ago, the Chicago Coal Merchants Association demanded that George Barker, reputed to be an ex-convict and gunman, be ousted from the position of Business Agent of Local 704 of The Coal Drivers Union, as a condition incident to the negotiation of a new wage contract, so it may be said that all our coal troubles are not within or about the mines.

Those who know the task of the real mine worker are given to wonder as to what will eventually be gained (except by a few lawyers) as the result of the internecine warfare now being conducted in the Courts of Illinois and the columns of The United Mine Workers Journal and The Illinois Miner (published in Oklahoma). The avidity with which many Union miners purchase bundle lots of the weekly sheets, teeming as it is with vipiturative abuse of their national president, can only be explained on the assumption that a portion of the American people like to revel in that which is sensational and scandalous. Given a bestial murder case, a crime committed against a child, or a salacious divorce case, and the court room will be jammed with morbid curiosity seekers. It is doubtless this same morbidity that prompts the support given this incendiary news sheet.

It is apparent to all thinking bystanders that the one force behind many Unions today is the fight for office—the desire to get one's front feet in the trough, and thereafter to stay there at all cost. If the rank and file of the mine workers are dumb enough to fail to sense this situation, then their case is hopeless. If they do realize their position, why do they not attempt to correct their affairs in an orderly, business like way, through the medium of their ballots and a National Convention?

Out in Wyoming, the mine workers are now passing through the ordeal of an election. At least one of the candidates for office made an appeal for support based upon an attack on the existing wage contract which he personally endorsed and advocated, supplemented by a thrust at his National President. Just as the wage contract provides that "the right to hire and discharge, the management of the mines and the direction of the working force, is vested in the operator," so does the right of the men to elect officers of their own choosing rest with them, and them alone. That there is an obligation on the part of the men to elect honest, efficient representatives, who will conduct the business affairs of the Union, including the task of enforcing the terms of the joint wage agreement, goes without saying. Perhaps a better recognition of this simple principle would, if more generally observed, have helped to avert the Union falling into the condition it now occupies.

The recent sporadic uprising occasioned by the National Miners' Union, one at least of whose officers was a paroled convict, has passed over and into the graveyard that has swallowed so many strikes in the last few years, the end result merely a few more half-fed and half-clothed, women and children, the ultra-vocal leaders busily engaged in reciting their prowess and explaining their fall-down in various speak-easies, or perhaps the back end of a Communistic owned grocery or barber shop.

We once knew a very wholesome Irish girl (long since returned to her native land) who invariably expressed her approval of all that was good which happened, and all that which was not good and which did not happen, with the words, "Thank God." When this number of the Employes' Magazine reaches our readers, the official status of District 22 will have been settled, all contests for office out of the way, and with the firm belief that "the Government at Washington still lives" and that the mine workers will muddle through some way, we will close by saying, that having avoided any expression that might be construed as favoring any particular candidate for office preceding the election, we too, can say "T. G."

The Accident Record For 1929

OUR Tono mine very fortunately went through the year 1929 without a fatal accident, and with very few non-fatal accidents of serious nature. Unfortunately, our Wyoming situation for the year shows a backward trend

The writer entered the service of the Company

on March 1, 1923, and therefore feels a substantial measure of responsibility for the conditions that have obtained since that time, as expressed in the following compilation:

Year	Total Man Shifts During Year	Fatal and Non-Fatal Injuries	Man Shifts Per Injury	Injuries resulting fatally
1923		305		16
1924		246		10
1925	479,130	311	1,541	6
1926	485,987	254	1,913	8
1927	452,125	256	1,766	7
1928	482,290	295	1,635	8
1929	513,964	276	1,862	12

One of the fatal accidents recorded for 1924 dated back to an injury dated March 3, 1922, and likewise, one of the fatal accidents reported for 1925 dated back to an accident occurring on December 9, 1921. If these two fatalities had occurred within the years in which the accidents happened, the record would have read:

1923	16	fatalities
1924	9	"
1925	5	"
1926	8	"
1927	7	"
1928	8	"
1929	12	"

During the year 1929, each of our six Wyoming mining communities suffered one or more fatal injuries, the twelve fatalities distributed as follows:

Rock Springs No. 8 Mine	3
Reliance No. 1 Mine	1
Winton No. 3 Mine	1
Cumberland No. 1 Mine	1
Hanna No. 2 Mine	3
Hanna No. 4 Mine	1
Superior "B" Mine	1
Superior "E" Mine	1
Total	12

Eleven of the twelve men killed left dependent families. The total number of dependents was 25, of which 14 were minor children. The wife of one of the men killed was an inmate of a home for mental disability, this workman also leaving a minor son. The cause of death has been classified as follows:

Mine Cars and Locomotives	3
Falls of Coal	3
Falls of Rock	6
Total	12

The average age of the men killed was 44.6 years, the youngest death occurring at 37 and the oldest at 54 years of age, the relation of the death period to age as follows:

37 years of age	1
40 years of age	2
41 years of age	1
43 years of age	3
44 years of age	1
46 years of age	1
53 years of age	2
54 years of age	1
Total	12

The average length of time these 12 men served with our company was 10 years, the shortest period four years, the longest period 19 years, indicating that lack of experience was not a contributing factor.

A study of the records was made to determine the day of the week and the hour of the day on which the injuries causing the twelve deaths occurred, with the following result:

Date	Day of Week	Time of Day
February 8, 1929	Friday	3:20 P. M.
February 14, 1929	Thursday	12:45 P. M.
February 14, 1929	Thursday	12:45 P. M.
February 22, 1929	Friday	9:15 A. M.
March 8, 1929	Friday	10:35 A. M.
May 6, 1929	Monday	6:45 P. M.
May 9, 1929	Thursday	2:30 P. M.
June 20, 1929	Thursday	11:00 A. M.
June 22, 1929	Saturday	1:10 P. M.
September 9, 1929	Monday	3:00 P. M.
October 30, 1929	Wednesday	12:15 P. M.
December 9, 1929	Monday	3:00 P. M.

It is quite evident from the compilation last submitted that the element of fatigue as expressed by the hour under which the accident occurred, did not enter into the situation, and likewise the day of the week would seem to have very little to do with the matter, three on Monday, one on Wednesday, four on Thursday, three on Friday, and one on Saturday. Three accidents occurred between 12 noon and 1:00 P. M., or within one hour and thirty minutes after the lunch hour, and three accidents occurred between 3 and 4 P. M., the remaining six accidents occurring at various times between 9 A. M. and 7 P. M.

That there is something definitely wrong with our Wyoming psychology, there can be very little doubt, at least a substantial number of both our fatal and non-fatal accidents preventable. The expenditure of money has undoubtedly made our properties safer from the standpoint of preventing the possibility of major accidents, such as a mine explosion, but it is very doubtful if any real betterment has been occasioned by such expenditure in the matter of reducing the individual accidents. On the other hand, we are beginning to wonder if our employes have not consciously and unconsciously relaxed in the matter of individual watchfulness, thinking perhaps that the company's activities would take care of them. As this article is written, the Senior Engineer of the U. S. Bureau of Mines, with an Associate Engineer, are making an exhaustive study of our roof accident situation, this Department of the U. S. Bureau of Mines carrying roof accident studies throughout various sections of the United States for a period of years. We are definitely hopeful that they will find it pos-

sible to make constructive suggestions to the company, but the real question is—what will be the individual employe's attitude toward his own safety?

Mixing Mud Pies and Wearing a Hair Shirt

A SHORT time since, Dr. W. O. Thompson, President Emeritus of Ohio State University, wrote the President of the United States a letter containing, in addition to holiday greetings, a few words of comment relative to the "medicine" making that so many American politicians revel in.

The President's reply to Dr. Thompson, which found its way into the public press, contains much of the humorously ironical, coupled with an abiding faith in the belief that a task well done will eventually be approved.

With the thought that the President's letter is worth reading and pondering over, we take the liberty to reproduce it herewith.

"My Dear Mr. Thompson:

"The solicitude and philosophic ripeness of your letter of Jan. 7 requires more than reciprocation of kindly holiday greetings.

"The human flood which flows through the White House shows all the dark colorings and flotsam that you mention. But it is brightened more than you think by the majority who, regardless of party, genuinely wish to help the president to succeed in his task.

"Of course, it is true that malice is sometimes the road to newspaper headlines, and there will always be partisans desirous that the president should fail, even if their stratagems injure the country or whose daily toil is to mix mud pies.

"But if these blots were other than exceptions this nation would not have swept to a mightier and mightier destiny every year since the independence.

"You well know of the wearing of hair shirts in the Middle Ages by way of reminder of sin and trouble. Somewhere lately I said that every man has a few mental hair shirts, and that presidents differ only by their larger wardrobes—for certain individuals, newspapers, associations and institutions officiate as haberdashers in this regard, with a high generosity which guarantees both humility and urbanity.

"There is even humor to be extracted from the fact that they have no compulsory powers. But, above all, the president has, for a few short years, the opportunity to speed the orderly march of a glorious people. And the inspiration of that moving is compensation that comes in larger measure to him than to any other man.

"No real believer in democracy questions the sureness of public judgment—if the public is given the truth; but there is a time limit in the triumph of truth.

"When we look back over history we see the periods of either moral, social, economic or political stagnation while the truth was en route and some variety of untruth occupied the scene.

"We can and must, however, greatly increase the production of truth, and we must know the truth before the grave interest of 120 million people is involved in government policies. We can sometimes speed up production before the ill-informed awakes to his opportunities.

"Fasts are bad for his digestion and the truth makes misrepresentation uncomfortable. And the truth, as you say, is hard to discover; it must be distilled through the common judgment of skilled men and women from accurately and patiently collected facts and knowledge of forces before the extraction of the essence of wisdom.

"The materials themselves are also hard to come by; it takes time and patience, especially as our many inventions have forever banished the simple life.

"In the meantime a vast clamor of half truths and untruths and injured facts will always fill the air and intoxicate people's emotions.

"The president, himself, cannot pretend to know or to have the time for detailed investigation. But the fine minds of our citizens are available and can be utilized for the search.

"So you will know why when you hear of more and more temporary committees, commissions, conferences, researches—that they are not for executive action (for which they are anathema), but are one of the sound processes for the search, production and distribution of truth. And they are more. They spread co-operation with government among our best citizens, not only in finding truth, but also they aid to spread it and to get action upon it.

"Our great American experiment has demonstrated that the people will of their own initiative take care of progress, if the government can remove abuse and help put the signs on the road, stimulation to all of which is part of the job of presidents.

"Of Lincoln's great formula the most important one-third is 'government by the people,' and they will govern themselves outside of the government when they see the light. It is from too much emphasis on 'government of the people' that we get the fundamental confusion that government, since it cannot correct much abuse, can also create righteousness.

"And now all this was not intended to bore your holidays, but just to indicate to you that my resolutions for the New Year include a continued effort to keep pure the wells of wisdom, and to reassure you that I have faith that the people want the truth determined even if it takes time and patience. I wish to you and Mrs. Thompson, all of the season's greetings.

Yours faithfully,

"HERBERT HOOVER."

Raising Pigs

A GREAT many thousand boys and girls who live on our American farms are members of what is known as the 4-H Club, an organization whose purpose is the betterment, education and training of the young people who live on the nation's farms.

The 4-H Club creed is:

"I believe in Boys' and Girls' 4-H club work for the opportunity it gives me to become a useful citizen.

"I believe in the training of my HEAD for the power it will give me to think, plan and reason.

"I believe in the training of my HEART for the nobleness it will give me to be kind, sympathetic and true.

"I believe in the training of my HANDS for the ability it will give me to be helpful, skillful and useful.

"I believe in the training of my HEALTH for the strength it will give me to enjoy life, resist disease and make for efficiency.

"I believe in the United States of America, in the state of ————, and in my resposibility for their development.

"I am, therefore, willing to devote my efforts for the fulfillment of these things which I believe.

The National 4-H club pledge is:

"I pledge my head to clearer thinking; my heart to greater loyalty; my hands to larger service, and my health to better living for my club, my community and my country."

Railroads, public service companies, commercial clubs, and various other organizations co-operate with the boys and girls of the 4-H Clubs, assisting in the development of the principles outlined in the creed above quoted.

Looking at the matter in a casual way, there would seem to be very little relation between raising pigs and mining coal, but it is a fact nevertheless that patient, persistent and intelligent effort is necessary to succeed in any walk of life, whether it be farming, coal mining, banking, operating a railroad or steamship line, or managing a large public utility.

At Bothwell, seven miles west of Tremonton, Utah, a station located on the Union Pacific eighteen miles north of Ogden, Reed Andreason, a 4-H Club boy, broke the western swine raising record by producing 4,173.5 pounds of pork from one litter of pigs.

Reed was inspired to get into the pig raising business by the fact that three boys studying in the Agricultural Department of the Bear River, Utah, High School succeeded in raising three individual litters of pigs weighing more than a ton. Reed decided to enter the game, purchasing a poland-China pig from his brother, who, Reed states, "needed the money," this purchase made in November, 1927. On the morning of March 15th, 1928, Reed visited the pen where his mother pig was quartered, finding her in possession of sixteen small, white, shivering off-spring.

Things went along fairly well for a few days, when one of the little fellows died, doubtless smothered. Three pigs not doing well, were put on a bottle diet, the remaining twelve forging ahead in good shape. Later on, the three weaklings pulled out of their "kinks," rapidly catching up to their brothers and sister.

Reed then started out with the help of his agricultural instructor, to establish a new record in production, and when on August 15th, his fifteen pigs were weighed, they were found to average 160 pounds each. Thereafter they were put on intensive feeding for 30 days. Finally, the eventful hour arrived, and on the 11th day of September, 1929, in the presence of a number of neighbors, witnesses and others, the pigs were weighed, and Reed's youthful chest bulged out when he found that the total weight of the 15 pigs was 4,173.5 pounds, or more than two tons, this is the first two-ton litter of pigs ever produced in Utah, and the heaviest litter ever produced in the West.

Raising pigs may sound like a prosaic occupation, but this boy brought not only his own brains and industry to the task, but in addition, he made good use of his High School Agricultural Instructor's teachings, and while lack of space prohibits publishing the whole story as gleaned from a recent copy of the Ogden Live Stock Digest, certain high points are worth recording.

When the spring came and after the first crop of alfalfa matured, the boy fenced off a half-acre, putting his pigs inside the fence, a stream of water with a row of poplar trees skirting the small enclosure. The pigs were fed alfalfa with chopped wheat and barley, supplemented by skim milk for a period. It is interesting to note that 100 pounds of powdered calcite were fed to the pigs in order to supply the necessary mineral element required for their development.

During the last forty days, the pigs were fed with soaked grain every hour of the daylight period, and all that they would eat, and towards the last, they had to be driven to the trough. When the fifteen pigs were weighed out, the lightest was found to weigh 234.5 pounds, the heaviest 303 pounds. Reed spent $317.34 on feed, receiving for fourteen of the litter $518.70, leaving him with the original mother pig, plus one of the younger sixteen, and $201.36 net cash.

There are three industries in the United States that occupy a more or less backward position, viz: agriculture, coal mining, and the cotton manufacturing industry. Intelligence in industry as displayed by Reed Andreason, will pull out the farming industry. The same intelligence in industry applied to coal mining, with an intelligent marketing program, will pull coal out. The cotton industry was built up in New England on cheap labor, coming in very largely from lower Canada. The development of water power and a new supply of even cheaper labor has to a large extent transferred

the cotton industry from New England to the southern states. The elimination of child labor and perhaps a general better conception of the rights and necessities of the working people will go far toward helping the cotton industry.

As we said in the beginning, there is not very much connection between pig raising and coal mining. Nevertheless, Reed Andreason's pigs doubtless moved over the Union Pacific System, their transportation absorbing some of our coal; in any case, Reed Andreason's story of success is worthy of repetition.

Coal Is Picking Up

THE total production of soft coal in the United States increased approximately 24,613,000 tons, 1929 compared with 1928, or 4.9 per cent The production for the past seven years was as follows:

Year	Tons	Year	Tons
1923	564,565,000	1927	517,763,000
1924	483,687,000	1928	500,745,000
1925	520,053,000	1929	525,358,000
1926	573,367,000		

The output of our Wyoming mines increased 133,242 tons, or 4.5 per cent, while the tonnage loaded mechanically increased 272,702 tons, or 18.2 per cent. Due to protracted drouth suffered in Washington and Oregon in 1929, the tonnage of our Tono mine fell off, the exact figures not available as this is written.

The year 1930 should fully equal 1929, under the heavy construction and improvement program outlined by the nation for the year before us.

Our Retired Employes

ON DECEMBER 31st, 1928, a total of 25 retired employes were on the pension roll of The Union Pacific Coal Company. During 1929, 13 names were added to the list, two pensioners dying during the year, leaving a total of 36 men on the pension roll December 31st, 1929, resulting in a net increase of 11 pensioners during the year.

World's Largest Stripping Shovel

FROM Mining and Metallurgy, published by the American Institute of Mining and Metallurgical Engineers, we glean the following information relative to the last thing in coal stripping shovels. This giant machine was recently placed in service at the Fidelity Mine of the United Electric Coal Company, Duquoin, Illinois.

"Coal is mined at the present time from three pits. The stripping in No. 1 pit is handled by the large shovel, and in pits Nos. 2 and 3 by combination units each consisting of a Marion drag-line and a Marion shovel, the drag-lines having 10-yard capacity buckets and the shovels 12-yard capacity dippers. The drag-line uncovers the top soil down to a predetermined depth, and then the shovel follows and finishes removing the overburden. Having greater range the drag-line deposits its portion well out of the way of the shovel's range. It is the intention of the company to add a fourth unit in the near future, which will give the mine a monthly capacity of 175,000 tons. The rock overburden is shot with L. O. X. produced in the company's own liquid oxygen plant, built by the Keith Dunham Co. of Chicago.

"All the shovels used at the Fidelity mine, including the new, large one, are Marion built. The latter is by far the largest shovel in the world. Although designed primarily for use as a 20-yard shovel, this excavator is used with a 15-yard dipper, which allows an extension of the boom. This gives the shovel a greater reach. Although the dipper capacity is rated 15 cu. yd. it is estimated that the dipper will hold 20 cu. yd., heaping measure. One scoop load of dirt would be sufficient to fill a room about the size of the bathroom in an ordinary home. The reach of the dipper is sufficient to place material about 85 feet above the ground. The dipper has a pushing and lifting power of around 100 tons, which would easily be sufficient to lift an ordinary car full of coal. The dipper, when moving around the dump at full speed, travels at the rate of about 20 miles an hour, and completes a trip in less than a minute. The complete shovel weighs approximately 1,600 tons. This is about twice as heavy as the largest shovel previously made. The deck of the shovel on which the electric machinery is mounted is about 20 feet above the ground and measures 60 feet long and 30 feet wide. The highest point on the shovel is about 110 feet above the ground.

"The electric equipment on the shovel aggregates the equivalent of approximately 4,500 h. p., but all the operations are controlled by one man. The control is the variable voltage type, by means of which the generator voltage is varied by varying the generator field. This allows rapid maneuvering and quick reversing, and also limits the torque to a definite safe value so that mechanical parts will not be subjected to undue strains or stresses. Power comes to the shovel through a trailing cable approximately 3 in. dia., wound on a cable reel attached to the rear of the shovel. The power supply is alternating current at 4,000 volts. This drives a 5-unit motor-generator set consisting of a motor, three generators, and an exciter."

Mining and Metallurgy published a picture of the 15-yard capacity dipper, resting on its forward side, a good sized automobile having been backed into the dipper, a man finding room to stand along side each side of the car.

This last product of the Marion Steam Shovel Company is indicative of the advance in stripping methods developed within the last quarter century, horses pulling plows and scrapers much in vogue in that not remote day. Mr. J. F. Joy, who invented the Joy Coal Loader, now represents the Marion Company in the middle west.

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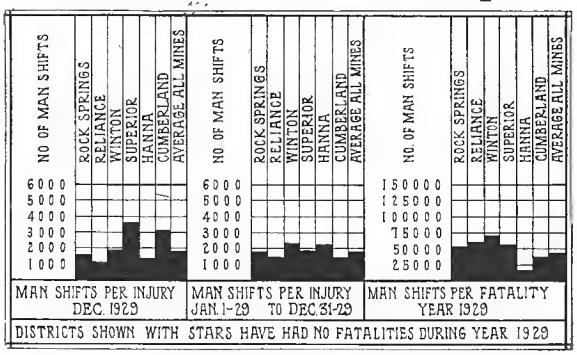
Your Town

If you want to live in any kind of a town
Like the kind of a town you like,
You needn't slip your clothes in a grip
And start on a long, long hike.
You'll only find what you left behind,
For there's nothing really new.
You knock yourself when you knock your town—
It isn't the town, it's you.

Real towns aren't made by me afraid
Lest somebody get ahead.
If everyone works and no one shirks
You'll raise a town from the dead.
If, while you make your personal stake
Your neighbor makes his, too,
Your town will be what you want to see
It isn't your town, it's you.

Make It Safe

December Accident Graph



The above graph presents the last accident graph for the year 1929, and taken as a whole the year has been anything but a satisfactory one. For the first time in several years, none of the six districts completed the year without a fatal accident, each having had at least one, and one district, Hanna, having had four during the twelve months.

During the twelve months completed there were twelve fatal accidents in the mines, the largest number since 1923 and four more fatalities than in 1928 when eight occurred. Based on a tonnage production, 3,060,632 tons of coal were produced or one death for each 255,052 tons of production, a decidedly low average. In producing the somewhat over three million tons, 513,964 man shifts of labor were required, or one death for each 42,830 man shifts.

In the analysis of the twelve fatal accidents the sad feature lies in the fact that at least five, possibly six, of these deaths were avoidable ones. We are a prodigal nation with our resources, and it is apparent that our prodigality extends to human life.

There was a slight decrease in the non-fatal accidents during the year, 264 non-fatal injuries being reported for 1929 compared with 278 the preceding year, a decrease of 14. While the decrease is slight, on the whole the severity of these injuries was not as great as during 1928 and the subsequent ratio of days lost shows a more favorable decrease. Of the non-fatal injuries it is safe to say that at least 75 per cent were avoidable, either on the part of the man or on the part of the company.

Coal mining is a hazardous occupation from which all the hazards can never be eliminated and a certain number of accidents will always result, but mining can be made safer and the yearly death toll, and the suffering and misery can be reduced. To make mines safe is not a one-man job or a one-company job, but it is part of the duty of every one connected with the industry. No one is asked to take an unnecessary risk, so why do it? Compensation allowance is a poor substitute for the semi-monthly pay check.

Do your part and the accident rate in the coal mines will show the same favorable rate of decrease as has been shown by railroads, quarries, mills and the many other industries not allied with mining.

Superior Wins Pennant and Books

By showing the greatest number of man shifts for each injury occurring, and by showing the largest percentage increase during the six months period over a cumulation period of five years, Superior wins both the 100 volumes of fiction for the Community Library and the semi-annual pennant.

This is the third time that the pennant and books have been won by Superior, they being the first ones to attain this honor, as a result of which the Community Council will be the proud possessor of 300 volumes of good fiction.

Although the race for the books was not as close as on one or two previous occasions, the pennant winner was decided by a much closer margin than ever before. Cumberland was such a close runner-up that it was only by Superior's slightly better record for December that the pennant was decided. For the first five months the number of man shifts per accident for Superior and Cumberland was exactly the same.

The record of all six districts was unusually good, only one district, Reliance, showing a decrease. The average increase for all districts of 18.43 per cent and the number of man-shifts per accident, 2,011, is the highest for any six month's period since the pennant and book contest was started.

Following is a tabulation showing the figures for the six month period July 1, 1929 to December 31, 1929 in the order they finished.

Place	Man-shifts	Injuries	Per Injury	Per cent increase Man-shifts or Decrease over previous period
Superior ...	66,615	25	2,665	62.70% Inc.
Cumberland.	18,375	7	2,625	46.73% Inc.
Hanna	37,250	17	2,191	24.84% Inc.
Winton	36,475	18	2,026	12.00% Inc.
Rock Springs	82,563	46	1,793	6.09% Inc.
Reliance ...	34,231	24	1,426	8.47% Dec.
Total	275,509	137	2,011	18.43% Inc.

Prizes and Awards for 1930

Commencing with 1930, it has been decided to change the awarding of a pennant to the district showing the best six month's safety record, and, in its place, award some suitable trophy, probably an ornamental clock, to the Community Council, for use in the Club houses. This will undoubtedly prove a more useful and satisfactory gift than the pennant, which has served its purpose.

The award of the 100 volumes of fiction to the district showing the highest percentage of increase over its preceding cumulative record will be continued. This may be varied in instances where the community has a sufficient fiction library and a lesser number of finer books of reference and biography substituted.

As in the past years, a watch will be given to each district going through the year without a fatal accident, the watch to be awarded by the votes of the men involved.

Each Foreman in whose mine no fatal accidents have occurred will be presented with a suitable award. Owing to the fact that oftentimes the same Foreman may win the award for two or more years, this prize will be varied from year to year in order to prevent duplications.

It is sincerely hoped that more watches can be given at the close of 1930 and that more Foremen will participate in the awards. For the past year, there is no district qualified for a watch, each having had at least one fatal accident and there are but two who have gone through the year without a fatality in the mine under their jurisdiction. These two Foremen are Mr. Thomas Overy, Sr., No. 4 mine, Rock Springs, and Mr. Fred Robinson, "C" Mine,

Superior. These two gentlemen will receive a suitable award for their good work in the near future.

The record of Mr. Overy is especially notable as, during the period of his incumbency at No. 4 mine, Rock Springs, no fatal accident has occurred.

December Accidents

Shot Firer—FATAL—Shot-firer employed in scraper loader place had just finished cleaning up small fall of rock. While standing near timber line, he was struck by piece of falling rock and received injuries from which he died about six hours later.

Inside Laborer—While taking feed drum from cutting machine, the drum slipped and his fingers were mashed between drum and coal rib.

Faceman—While working at face, both ankles were bruised and cut by fall of roof rock.

Machine Runner—Machine was in operation when rope drum came off, striking and burning foot and toes.

Miner—Piece of coal fell from face injuring left foot.

Miner—Claims to have been struck in eye by piece of coal flying from face.

Miner—Was holding prop in position to be set while partner went for cap piece. Piece of rock fell from roof, rolling over and striking him on leg, causing a fracture of the leg.

Miner—Small piece of coal bumped from face striking eye and causing a corneal ulcer.

Driller—Was holding drill to start hole when it caught glove throwing him and injuring right fore-arm and hand.

Faceman—Was setting cross bar when bar fell injuring back and muscles of abdomen.

Miner—While loading a car, he bruised fingers between two large pieces of coal.

Faceman—Was pulling loose rib coal when piece fell from rib striking and bruising toes of right foot.

Miner—While mining a small piece of coal fell from face lacerating hand. He continued at work the wound later becoming infected.

Miner—A piece of coal fell from rib catching leg between the falling coal and a piece of coal on the floor, causing a compound fracture of the leg.

Miner—Was lifting a piece of rusty chute iron. In so doing he cut his finger, cut developing infection.

Machine Man—While working at face was struck on side and chest by piece of coal thrown by the scraper rope.

Car Repairer—Sprained right knee when piece of corrugated iron he was lifting fell on leg.

Driver—While taking horse up man-way he was kicked on leg receiving a bruise.

Faceman—While working at face, piece of top coal fell, causing laceration of scalp.

Faceman—Was picking at face when struck on back and shoulders by small piece of roof rock causing contusions.

Basketball Games, Rock Springs' Major Winter Sport, Accommodated in Old Timers Building

Rock Springs' High Loses to Milan's Hanna Team

By Elmer Halseth

More than two thousand basketball fans gathered in the large Old Timers Building Friday evening, January 10th, to witness the first basketball game to be played on the new floor, and the first game to be played this season at Rock Springs. The Hanna boys were the victors, the game ending 38 to 17.

The first quarter started and continued to be as exciting an eight minutes of basketball playing as bas been demonstrated in Rock Springs for many a season. In the early minutes of play, the Rock Springs team had the edge on the Hanna team, and it seemed that the final outcome of the game would depend on sheer endurance, with a likelihood of Rock Springs coming out victors. Even the second quarter continued to be a see-saw affair for several minutes, until the more experienced Hanna team struck its stride. After that, no one present was in doubt about the final outcome.

Hanna has an unusually fine High School team and to say that the Hanna Basketball team is a smooth working aggregation is merely to give Coach Milan and his boys their due credit. They will no doubt be in the running for state honors at the High School tournament at Laramie in March.

It must be said of the Tigers that they worked together like a veteran team during the first quarter, but after that period they seemed to lose their unity, their floorwork, and their levelheadedness, displaying resultant hesitancy, fumbling and a general bewilderment which they were unable to overcome. Yet they never lost their determination to battle on to the end, even though their opponents shots baskets almost at will. Radakovich, with his confidence and poise, showed much promise of becoming a first class basketball player, and his teammates, Travis and Shuester performed unusually fine for beginners. With these boys growing into the basket ball game, Rock Springs High will have a team that will hold its own against any state aggregation.

The following boys played:

Rock Springs	Hanna
C. Smith (F)	Matson (F)
J. DeBernardi (F)	Campbell (F)
G. DeBernardi (C)	Salo (C)
Ben Toucher (F)	Crawford (G)
K. Buckley (F)	Dickenson (G)
F. Adams (F)	Lucas (F)
Jr. Pratt (C)	Wide (G)
Shuester (G)	
C. Travis (C)	
E. Radakovich (G)	
F. Morgando (G)	
B. Culver (G)	
L. Pentilla (G)	
C. Burrell (C)	

For the Hanna team, Salo showed up the best, making eight field baskets and two free throws.

Give Me My Due

The Judge: "Mrs. Maloney, the evidence shows that you threw a stone at Officer Waddell."

"It shows more than that, yer honor," interrupted Mrs. Maloney. "It shows Oi hit him."

Tenshun!!

The squad of recruits had been taken out to the rifle range for their first try at marksmanship. They knelt at 250 yards and fired. Not a hit. They moved up to 200 yards. Not a hit. They tried it at 100. Not a hit.

"Tenshun!" the sergeant bawled. "Fix bayonets! Charge! It's your only chance."

Forgetting the Scot

To a Jewish ex-service man an acquaintance remarked: "So you were in the army, Ikey?"

"Oh, I was in the army," was the proud response.

"Did you get a commission?"

"No, only my wages."

Stupid

Football Enthusiast—Wot's all the megaphones for?

Chorus of Men (lined up for the match)—Why, ain't you 'eard? The ref's 'ard o' 'earing!

The practical note has finally been sounded in a contest where a prize is given to the infant that sleeps the soundest and longest.

Disraeli and the Suez Canal

SOME fifteen or twenty years ago, George Arliss, actor supreme, appeared in the play "Disraeli," the story of the purchase of the Suez Canal by the Prime Minister of England, Benjamin Disraeli, a man who descended from a family of Spanish Jews and who later became Lord Beaconsfield. Those who were privileged to see Arliss in the original play, have not failed to comment on the fidelity with which the "talkie" of the same name follows the old play as originally presented on the American stage.

In both the play and the current "talkie" presentation, a certain poetic liberty was taken by the author when Beaconsfield's devoted wife Mary, is made to enter in the closing scene of the production. In this scene, Beaconsfield, having secured the passage of the Titles Bill, conferred on his queen, Victoria, the title of Empress of India. This title, the basis of the brilliant court scene, was conferred in 1876, Viscountess Beaconsfield having died in 1872.

If a traveller desired to get from the Mediterranean into the Indian Ocean in 1865, he would either have to round the Cape of Good Hope or otherwise take a slow moving railway train from Alexandria to Cairo, and thereafter ride through a hot, sandy desert on mule or camel-back along the line of the present canal across the isthmus of Suez, a journey of many days' duration. Such was the condition when a new genius arose, Ferdinand de Lesseps, who conceived and carried out the project of cutting a canal across the desert, thereby linking up the peoples and the commerce of the East and the West.

In November, 1929, the sixtieth anniversary of the opening of the Suez Canal was celebrated in England and in Egypt, and the momentous days of 1869 were re-enacted. In those days there was no Port Said, but a small village of mud and wattle huts; there was no verdant Ismailia gleaming like an emarald on the edge of the arid land of Goshen; there were no Bitter Lakes, but only steep depressions in the Egyptian desert covered with salt and scrub; there was no Suez at the entrance to the Red Sea.

The opening of the Lesseps' Canal was a momentous achievement, a mile-post in the world's affairs. It was a task which no people since the Pharaoah's had been able to consummate, although that ancient race, with mechanical appliances of the most elementary character, and with labor whose leaders knew little of the science of engineering, and without adequate means of transport for water and food, did drive a tiny canal linking together the two seas.

All these obstacles were faced and foiled by **le Grand Francais,** as Gambetta used to call Lesseps. But he triumphed over difficulties even greater than these. For England, in the powerful person of Lord Palmerston, was against him, the Foreign Minister sincerely believing that Lesseps was out to capture Egypt for the French. With Lord Palmerston's enormous prestige and the backing of Parliament, it was not difficult to sow doubts in the minds of other countries as to the practicability of the Canal, and it was easy to persuade Turkey—the suzerain Power that Egypt was passing out of her possession. But the vision, the diplomatic skill, and the persistence of Lesseps' indomitable character, gradually wore down all opposition; and, with the help of his staunch friend Mahomet Said, the Viceroy of Egypt, and of Napoleon III, Emperor of the French, the Canal was ultimately built. Imagine the satisfaction of seeing the waters of the Mediterranean pouring into Lake Timsah in 1862; and, seven years later, the Red Sea rushing into the Bitter Lakes and so filling the Canal with salt water from end to end! The money was found mainly in Egypt, by the Viceroy, and in France, where forty thousand shareholders invested in about five shares apiece. It has been said that the peasantry of France dug the money to finance their portion of the Canal out of their gardens.

On November 17th, 1869, the Canal was declared open, and sixty-eight ships of all nations, headed by the Empress of the French in the "Aigle," bearing the crowned heads and representatives of many nations, proudly sailed the whole length of the Canal from end to end. The rejoicings knew no limit; the age of miracles was not past. The Bedouins of Upper and Lower Egypt, ten thousand tourists from Europe, battleships and passenger-steamers, royal yachts and desert caravans, were massed in and around the waters of Port Said to see this miracle which had come to pass. On the vigil of the opening there were religious ceremonies for Christians and Mohammedans; there were, on the following day, such high festivals held along the banks of the Canal as had never been dreamed of in the

Sixty-eight ships representing all nations, headed by The Empress of the French in the "Aigle," sailed the Canal from end to end.

(From London Illustrated News, 1869.)

deserts of Arabia. Receptions and dinners and a ball given at Ismailia by the Viceroy; the opera "Aida," composed by Verdi especially for the occasion, performed in Cairo; festivities of the most joyous description to greet the illustrious guests when they reached the Southern terminus at Suez.

Eugenie, the Empress of the French, led the ceremonies. Born at Granada, Spain, in 1826, her father a Spanish noble, her mother of Scotch extraction, she became the wife of Napoleon III in 1853 and thereby Empress. Her life was an eventful one, in many ways tragic. In 1856, a son, the Prince Imperial, was born, and when the war broke out between France and Germany in 1870, she acted as regent in the absence of the Emperor. In September, the revolution forced her to leave for England, where she was joined by the Emperor and Prince Imperial, the exiles taking up permanent residence in England, where the Emperor died in 1873. In 1879, the young Prince was killed by Zulu savages while serving in the British army in Africa. The opening of the Suez Canal, occurring as it did in the year preceding the political downfall of the Emperor, was the most eventful occurrence in the career of Eugenie. After the death of her son, she went into retirement, slowly breaking in mind and body, dying just a few years ago in the England that gave her a home when she was compelled to leave her own country.

The celebration of 1869 was not, as Lord Palmerston had vainly thought, to celebrate the repossession of Egypt by the French, as in the days of Napoleon. In was to acclaim the achievement of a greater and a graver object. **Aperire terram gentibus** was from the beginning the avowed object of Lesseps' grand conception; to draw the peoples of the East and the West closer together by the bonds of civilization and of commerce. Today, nearly 57 per cent of the traffic through the Canal is carried in British ships; today, the British Government has seven-sixteenths of the Canal shares, which were bought by Disraeli in 1875 for four million pounds, and which are now worth 72,000,000 pounds, having earned no less than 38,600,000 pounds in the interval by dividend and interest. The story of how Disraeli came to buy these shares in 1875—during a Parliamentary recess—is well known. The whole operation, thanks to the house of Rothschild, was carried out secretly, and in ten days. It was a coup which resounded throughout the civilized world, and of which its author was justly proud. His own view of the transaction is naively told in a letter from him to Lady Bradford (November 25, 1875), which has just appeared in the volumes edited by the Marquess of Zetland:

> "I have purchased for England, the Khedive of Egypt's interest in the Suez Canal. We have had all the gamblers, capitalists, financiers of the world, organized and platooned in bands of plunderers, arrayed against us, and secret emissaries in every corner, and have baffled them all, and have never been suspected. The day before yesterday, Lesseps, whose Company has the remaining shares, backed by the French Government, whose agent he was, made a great offer. Had it succeeded, the whole of the Suez Canal would have belonged to France, and they might have shut it up!
>
> "We have given the Khedive four millions sterling for his interest, and run the chance of Parliament supporting us. We could not call them together for the matter, for that would have blown everything to the skies or to hades . . . . . "

Eugenie, Empress of the French, leading the ceremonies at the Suez Canal dedication.
—From London Illustrated News, 1869.

Such, in very broad outline, is the romantic story of the Suez Canal during the sixty years of its existence, and of Great Britain's fortunate connection with it. It is managed—being a French company in all but name—by a Board consisting of twenty Frenchmen, a Dutchman, and ten Britishers, three of whom represent the British Government, and the other seven are the representatives of British trade and shipping. The Concession runs out in 1968, and, if it is not renewed, it will revert to the Egyptian Government, who were the original concessionaires. The Canal has proved itself so invaluable to Great Britain and to the commerce of the whole world under its present management, that no time should be lost in opening up negotiations for a renewal of the Concession on terms that are equally advantageous to Egypt, to the company, and to its shareholders; since the transference of the possession of the Canal, or of its maintenance, to inexperienced or to possibly hostile hands would be an act of criminal negligence for which the whole world would hold Great Britain primarily responsible.

If you have not seen the picture Disraeli, do so when you can. In it you will see America's greatest actor, living again the part of England's great Prime Minister, Beaconsfield. You will note the vanities of a great man, expressed in his love for color—bright hued waistcoats, the vivid plumage of tame peacocks, the desire to be in the company of lovely women—the natural attribute of his oriental heritage. Back of all this was the great statesman, the man who thought of a greater England in terms of world trade—again evidence that blood will tell. In this picture, you will likewise see two great bankers, the one a pompous Scotsman, the other a self-

(Please turn to page 62)

Engineering Department

Study of Electric Light and Power Service

The following article, the second of a series of five, has been abstracted from a study of Electric Light and Power Service, prepared by Mr. Samuel S. Wyer, Consulting Engineer, of Columbus, Ohio. The three subsequent sections will be published in the March, April and May issues of the Employes' Magazine. Mr. Wyer's engineering studies, brilliant in character, are noted for their conciseness and accuracy. We are indebted to him for the privilege of abstracting from his work.

Fuel Sources

COAL is our principal source of fuel. While oil and natural gas are used, in comparison to the total amount of coal, they are relatively small. Most of the oil and gas used is merely burned under steam boilers, the same as coal. Only a relatively small part is used directly in oil or gas cylinders.

The power of the wind is of no consequence except in small isolated plants on farms. The only tidal power projects under consideration are in reality water power projects where the water pushed in by the tide would be held temporarily in reservoirs and harnessed during the low tide period.

The heat evolved in the burning of the coal vaporizes the water in the steam boiler, and the expansive power of the steam then drives the steam turbine which in turn drives the electric generator where the mechanical energy from the driving steam turbine is converted into electricity. In one plant in the united States, mercury vapor instead of steam is used in driving the turbine.

Today public utility plants burn 1.76 pounds of coal per K. W. H. whereas in 1919 they burned 3.2 pounds of the same fuel.

This is merely the average of the large public utility plants as now operated. There is no way of getting an exact figure as to the amount of coal that was saved by shutting down many small isolated steam plants where the coal consumption was frequently 10 pounds per kw. hour and instead take the electric energy from a large modern central station.

The bituminous coal industry in the United States is overdeveloped both as to plant capacity and number of men. Among the reasons for this are the following:

1. Increasing fuel economies in electric power plants have brought about the condition that today 45 per cent less coal is required per kw. hour than was used ten years ago.

2. The decreasing coal consumption of the large central stations is only a part of the savings because many small inefficient steam plants have been shut down.

3. The rapid introduction of water power obviously replaces coal. During the last 10 years, water power has gone in at the average rate of 520,000 horsepower per annum, replacing annually an average of 4.5 million tons of coal. The 6.5 million horsepower development of the St. Lawrence-Niagara River Projects, for instance, would replace annually 58 million tons of coal, or about 10 per cent of the capacity of the bituminous industry.

The annual coal savings just discussed have an immediate social effect by decreasing the number of coal miners necessary, and, therefore, further intensifying what is already a bad situation. On the basis of an annual average production of 1,000 tons of coal per miner, the following number of men would be released for other work if the increase in total industrial business done in the United States did not offset the improved economy in the use of coal:

Decreasing coal consumption from steam plants	35,280 men
Electricity generated from present water power plants	29,920 men
Proposed St. Lawrence River projects	58,000 men

Locating huge power stations at coal mines is not a new idea, nor would it completely revolutionize the electric industry. Private industry has already built such plants, the operating facts and limitations are known. Six hundred tons of water must be available for each ton of coal. There are few locations in mining districts that have an adequate supply of usable water. Such a location would save freight on coal, however freight is a small part of the total cost of electric power production. In some cases the saving in freight would be more than wiped out by the increased cost of transmission from the greater distance from the mine to the center of distribution, as compared with building a large station near the distributing plant.

Recently there has been advocated the plan of removing valuable by-products from bituminous coal before burning as fuel in power plants. The problem of saving such by-products as gas, ammonia, tar, etc., is largely an economic problem, and, when such products can be recovered profitably, the plan is subject to rapid development. Some coals that are now used, however, do not contain by-products in commercial quantities, and, only under favorable conditions, does the value of the by-products themselves warrant the investment in the extensive plants required to recover them. In steam power plants with rapidly varying loads, the processing of coal as it is used is very difficult of practical application and the principle is not yet established as one of sound economics.

Of much more interest to the public is the removal of by-products in coal used in the home. Annually, our homes use practically twice as much bituminous coal as our electric utilities, and, if the coal used in the home had the by-products removed and we burned the residue coke only, we could then solve the unnecessary smoke nuisance which is a blot on our present civilization. Such by-product removal from coal going into the home will tend to make less feasible coal processing for electric utilities.

Cheaper fertilizer for the farmer is an urgent present need. The new processes for taking nitrogen directly from the air will halve the cost of nitrogen fertilizer in the next few years. This lowering of the the price of nitrogen will, of course, lower the revenue that can be obtained from taking nitrogen from coal and will, therefore, tend to make coal processing less attractive.

Coal is a small part of the cost of electric power production. The total generated cost of the current ready to go out on the transmission line is but a small part of the total cost of rendering electric service to the domestic consumer. Even where commercial conditions make by-product removal feasible, it could have little effect on the cost of current to the ultimate consumer.

When any fuel is burned, combustion products must be formed. If the combustion is not perfect, then minute particles of solids—called soot—carried in the combustion

products makes these visible. The term "smoke" is applied to combustion products that carry visible solid matter. As the solid matter increases, it increases the density of the color until the smoke becomes an opaque dark cloud.

A nuisance is anything which interferes with the rights of a citizen, either in person, property, enjoyment of his property, or his comfort.

The smoke nuisance from a water power plant comes primarily from improper burning of bituminous coal. For this there is no excuse. Proper handling of up-to-date coal-burning equipment will enable any large power station to operate without making offensive smoke. Contrary to popular opinion, offensive smoke from such plants if continued is not a sign of prosperity but the mark of managerial stupidity, as the carbon in the smoke represents dollars of value that are destroyed in addition to the constant irritation of the public by the continuing of such an unnecessary smoke nuisance.

Source of Water Power

In the last analysis, this is heat. The heat of the sun vaporizes the sea water, the vapor is carried inland by the winds, lower temperatures precipitate the vapor in the form of water or snow and it then begins its return via the streams to the sea and the cycle is again repeated.

Of the water which falls upon the land, substantially an average of 20 inches in depth over the drainage area evaporates soon after it falls. "This is called the 'fly-off' because it almost directly is returned to the atmosphere. About one-sixth of the water is consumed by the plants or goes far enough below the surface to join the underground water. This is called the 'cut-off'. The remaining one-third passes into the rivers and thence to the sea. This is called the 'run-off'."

"Those who are not engineers, or have not studied meteorology, or geology, perhaps do not appreciate how unequal is the precipitation and how unequal the flow of streams. It not infrequently happens that the larger part of the precipitation of one year comes within two or three months; indeed, for large areas of the country this is the normal condition of affairs, and sometimes a major portion of the precipitation occurs within a few days. In a single great storm the larger part of the precipitation of one year may fall. The run-offs from these great storms produce floods. It will be appreciated that in consequence of the extreme inequality of rainfall, most of the streams have a very uneven flow under natural conditions. It is therefore necessary to consider what shall be done to hold back the storm water and thus secure a uniform flow."

Rainfall is the initial source of water in all rivers. Rainfall is not continuous but periodic and varies largely with different seasons. Therefore, unless there is a natural or artificial storage to equalize the volume, the flow of a river will vary approximately with the rainfall. Variable flow is obviously the natural condition of a river.

There is a well established popular belief that floods and droughts are indirectly due, in a very large measure, to the cutting away of the forests on the hillsides and that reforestation would correct the damage already done, prevent the annual floods and materially increase the rainfall at the usual seasons of drought. While it is undoubtedly true that the forest cover does have some beneficial effect upon the run-off after the rainfalls have occurred, it is, however, not true that the forest would take the place of storage reservoirs as an adequate and effectual means of stream flow regulation.

The hope has been held out continually that if we were to build reservoirs for flood control, the stored water could immediately be harnessed and made to pay for the project. One clearly defined limitation has not been appreciated. A flood control reservoir, to be effective for flood control, must be empty when the flood comes. If the reservoir happens to be filled when the flood comes, it will be of no value in retarding the flood flow. If the reservoir must be empty when the flood comes, obviously, it could be used only a very small part of the time for power development.

The clear cut distinction between coal and water power in the matter of saving for future use is not appreciated. Coal can be held indefinitely but is not replaceable and when once used is gone forever. Water power is constantly being replaced by nature's processes but cannot be held for the future. If it is not used at the moment that it is available, its serving possibilities are lost for all time.

Falling water possesses energy. This may be made to do work and converted into power. Work is overcoming resistance without regard to time; power is rate of doing work, that is, doing work within a specific limit of time. Water power is, therefore, the power that may be produced by the energy of falling water, and requires both fall and water. The water in falling from the higher level down to the lower, through the tube that conveys it to the turbine, not only exerts a pressure on the vanes of the turbine, but makes the vanes revolve and the turbine drives an electric generator and the mechanical energy of the turbine is here converted into electric energy. After the electric energy starts on the line, the electrical transmission conditions then are just the same as for a steam plant, because after the electric current reaches the outgoing feeder line there is no difference in type of equipment in transmission and distribution as between a steam plant and a water power plant. In water power, in general, the generation cost would be less than in steam, and the transmission cost slightly more, but the part of the domestic consumers cost that does to distribution would remain practically the same.

Water power statistics are almost universally in terms of horsepower as defined in a previous article. Water power is usually sold in terms of Kw. one horsepower equalling .746 Kw.

Water power is not free. In the consideration of water power, many well meaning persons think only of the free gift of nature and entirely overlook the part that man's labor and money must necessarily play in the realization of the bounties of this gift. There seems to be an impression among some people that, since water runs down hill, water power can be developed at very little cost and with very little risk. Such an impression is, in most cases, very far from the truth. Water power is worth just what can be gotten out of it in competition with power manufactured from coal.

"The history of water power enterprise is not by any means a history of unbroken successful effort. It is strewn with wrecks and there is no industrial field in which a sound engineering preliminary judgment, as well as careful and economical financing, would seem to be more necessary."

While much has been said about harnessing our water powers, there has been little appreciation that some one must furnish the money for getting, maintaining, and ultimately replacing the harness and hire labor for continuous direction of the harnessed energy. This is where cost arises, not in the resource itself.

Of the total of 1,026 million horsepower of prime movers installed in different activities, the installed capacity of water wheels at developed sites is 12.3 million. The total potential water power is 38 million, or considerably less than the combined power used in electric central stations and manufacturing plants today.

In no case will water power affect distribution where 67 per cent of the domestic consumer's cost accrues. In some cases the transmission cost may be actually higher than with a closer fuel-using plant. The domestic consumer's service costs more, not because he is a consumer living in a home, not merely because he is a small quantity consumer, but because he is a short hour user. Therefore the domestic consumer's high initial cost comes from the short period of use and extensive water power development cannot alter this and will not materially lower the domestic consumer's cost. *(To be continued.)*

South Polar Magnetism

By C. E. Swann and J. L. Libby

THE South Polar region has a particular significance at the present time on account of Commander Byrd's recent discoveries in the Antarctic region. The North Polar regions have been well mapped but the South Polar region has been more or less of an unknown area.

Terrestrial magnetism, or the earth's magnetism, has a long history. Its early growth was slow, and considerable uncertainty prevails as to its earliest developments. The properties of the magnet were to some small extent known to the Greeks and Romans before the Christian era, and compasses employed in Europe at least as early as the 12th Century. In China and Japan compasses of a kind seem to have existed at a much earlier date, and it is even claimed that the Chinese were aware of the declination of the compass needle from the true north before the end of the 11th Century. Early scientific knowledge was usually, however, a mixture of facts, very imperfectly ascertained, with philosophical imaginings. When an early writer makes a statement, which to a modern reader suggests a knowledge of the declination of the compass, he may have had no such definite idea in his mind. So far as Western civilization is concerned, Columbus is usually credited with the discovery —in 1492 during his first voyage to America—that the pointing of the compass needle to the true north represents an exceptional state of matters, and that a declination in general exists, varying from place to place. The credit of these discoveries is not, however, universally conceded to Columbus. G. Hellman considers it almost certain that the departure of the needle from the true north was known in Europe before the time of Columbus. There is indirect evidence that the declination of the compass was not known in Europe in the early part of the 15th Century, through the peculiarities shown by early maps believed to have been drawn solely by regard to the compass. Whether Columbus was the first to observe the declination or not, his date is at least approximately that of its discovery.

The next fundamental discovery is usually ascribed to Robert Norman, an instrument maker. In "The Newe Attractive" (1581) Norman describes his discovery made some years before of the inclination or dip of the needle. The discovery was made more or less by accident, through Norman's noticing that compass needles which were truly balanced so as to be horizontal when unmagnetized, ceased to be so after being stroked with a magnet.

Another fundamental discovery, that of the secular change of the declination, was made in England by Henry Gellibrand, professor of mathematics at Gresham College,

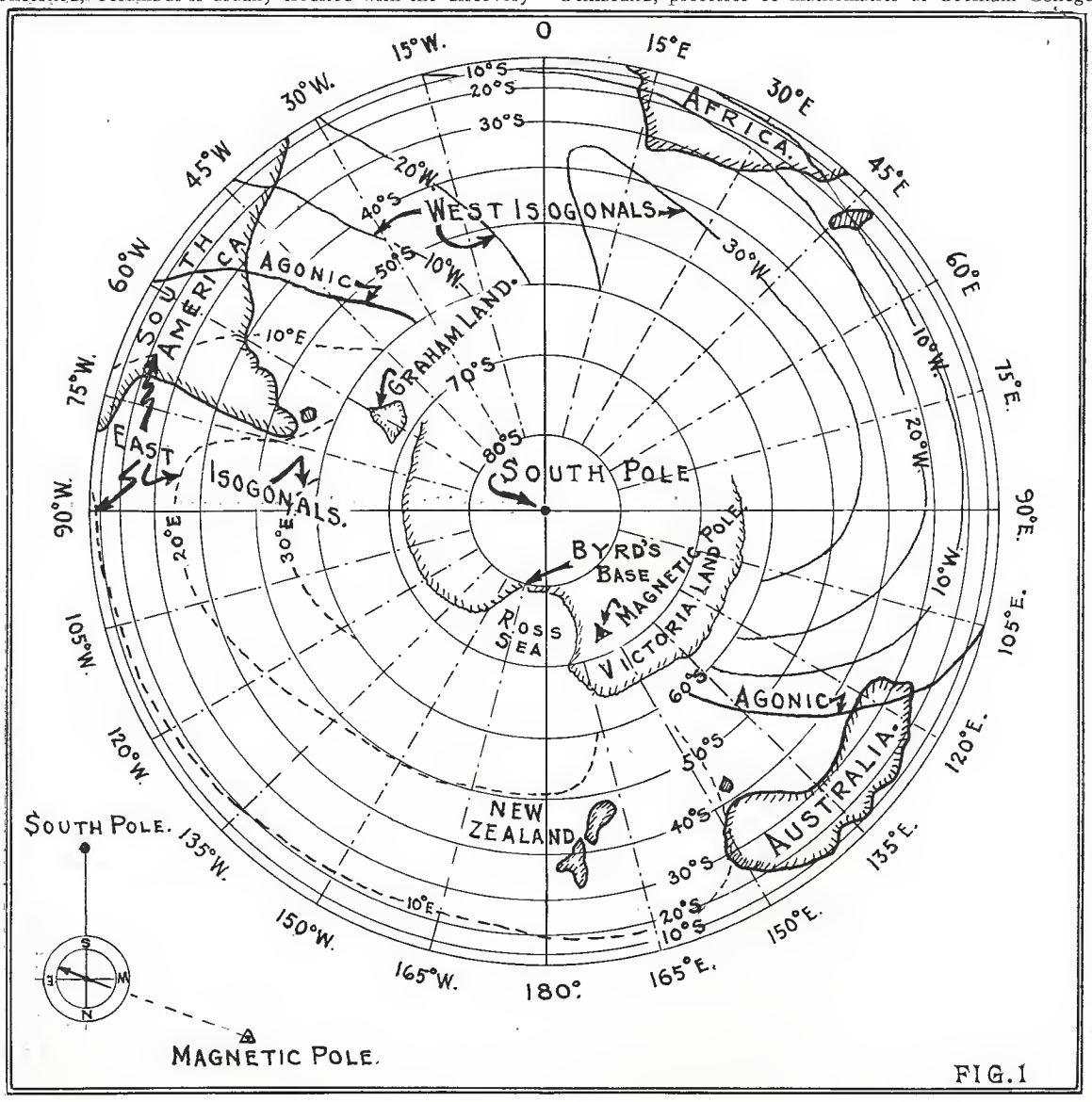


FIG. 1

who described it in his Discourse Mathematical on the Variation of the Magnetical Needle together with its Admirable Diminution lately discovered (1635). The history of this discovery affords a curious example of knowledge long delayed. William Borough, in his discourse on the Variation of the Compass or Magnetical Needle (1581), gave for the declination at Limehouse in October, 1580, the value 11 degrees 15 minutes East approximately. Observations were repeated at Limehouse, Gellibrand tells us, in 1622 by his colleague, Edmund Gunter, professor of astronomy at Gresham College, who found the much smaller value of 6 degrees 13 minutes. The truth of the gradual change in declination was not fully appreciated until 1633 when some rough observations at Limehouse gave a value still lower than that found by Gunter. It had generally been accepted as a fact that the declination was absolutely fixed.

A third fundamental discovery, that of the diurnal change in the declination, is usually credited to George Graham (1675-1751), a London instrument maker. Previous observers, Gellibrand and others, had obtained slightly different values for the declination at different hours of the day, but it was natural to assign them to instrumental uncertainties. In those days the usual declination instrument was the compass with pivoted needles, and Graham himself at first assigned the difference he observed to friction. The observations on which he based his conclusions were made in 1722, an account of them was communicated to the Royal Society and published in the Philosophical Transactions for 1724.

Between 1756 and 1759 J. Canton observed the declination changes on some 600 days and for the first time was able to deduce their general character. He found that the most prominent part of the regular diurnal change in England consisted of a westerly movement of the north pointing pole from 8 or 9 A. M. to 1 or 2 P. M., followed by a more leisurely return movement to the east. He also found that the amplitude of the movement was considerably larger in summer than in winter. Canton further observed that in a few days the movements were conspicuously irregular, and that aurora was then visible.

Another landmark in the history of terrestrial magnetism was the discovery towards the end of the 18th Century that the intensity of the resultant magnetic force varies at different parts of the earth. A Frenchman, Paul de Lamarion, is credited with this discovery but it remained for the great traveler Humboldt to present the information for public use between the year 1798-1803.

Italy, England and France claim most of the early observational discoveries, but Germany deserves a large share of credit for the great improvement in instruments and methods during the first half of the 19th Century. Measurements of the intensity of the magnetic force were somewhat crude until Gauss showed how absolute results could be obtained, and not merely relative data based on observations with a particular needle. Gauss devised the bifilar magnometer still largely used in instruments measuring changes of horizontal force but much of the practical success attending the application of his ideas to instruments seems due to Johann von Lamont (1805-1879), a Jesuit of Scottish origin resident in Germany.

The institution of special observations for magnetic work, now scattered in various parts of the world, is largely due to Humboldt and Gauss whose observatory at Gottinjen began regular observations in 1834 and from these observatories accurate information is now available relative to the expected action of the magnetic needle in different parts of the world.

The usual method of conveying information as to the value of the declination at different parts of the earth's surface is to draw curves on a map—the so-called isogonals—such that all points on any one curve the declination at a given specified epoch has the same value. The information being of special use to sailors, the preparation of magnetic charts has been largely the work of naval authorities more especially of the hydrographic department of the British Admiralty. The object of the Admiralty world charts produced in the Encyclopedia Britannica by permission of

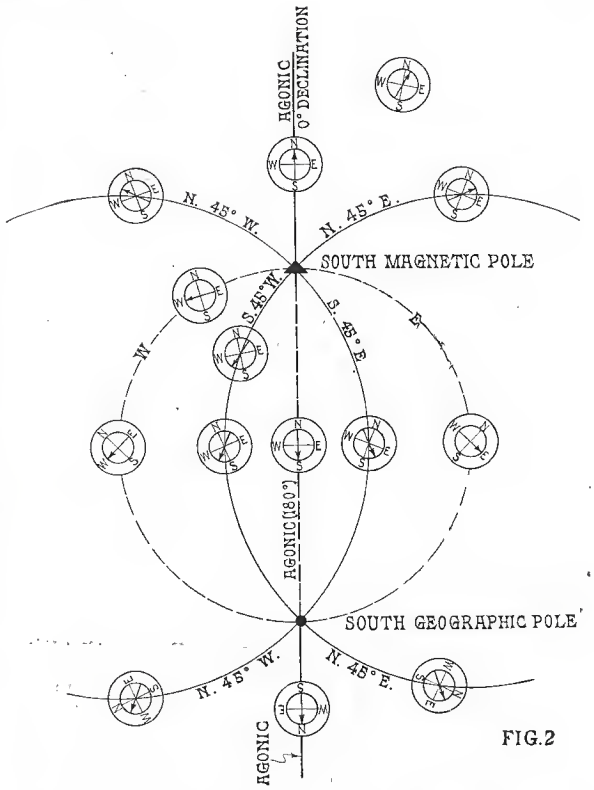


FIG.2

the hydrographer is rather to show the general features boldly than to indicate minute details.

From the hydrographers map showing isogonal or lines of equal magnetic declination and recent information published we have prepared two sketches.

Figure I. Southern Hemisphere

(1) Showing location of South Magnetic Pole, the Geographic Pole and Isogonic Lines (lines of equal magnetic declination). The Agonic Line is an isogonal line where the needle points due north and south.

(2) On the Agonic Line between the South Magnetic Pole and the South Geographic Pole the needle has 180 degree declination instead of zero declination shown south of the Magnetic Pole on the Agonic Line.

(3) Approximate location of land area at the Pole and Commander Byrd's base at Wales Bay in the Ross Sea.

(4) The insert shows the approximate pointing of the magnetic needle at Commander Byrd's base, the south end pointing to the Magnetic Pole and the south end of the compass pointing to the South Geographic Pole; the needle reading a little south of east.

Figure II.

(1) Shows the position of the needle near the Magnetic and Geographic Poles.

(2) The Isogonal Lines are shown for true North, North 45 degrees East, East, South 45 degrees East, South, South 45 degrees West, West, and North 45 degrees West. Note that the needle points in a reversed position for all readings taken at points within the area bounded by the Isogonal Lines of 90 degree declination or readings of due East or West.

The Magnetic needle is very erratic in behavior in the vicinity of the Poles and is not a reliable instrument in these regions. This is due to the Magnetic Pole not coinciding with the true Pole, also the lines of magnetic force which the needle parallels when in position for readings are increasing in dip as we approach the Magnetic Pole and are vertical at the Magnetic Pole. At Commander Byrd's base the Magnetic needle would stand nearly vertical.

Information found in the Encyclopedia Britannica has been freely used in the preparation of this article.

The Strong Boy of Gentryville

(Taken from "Abe Lincoln Grows Up" by Carl Sandburg.)

WHEN he was eleven years old, Abe Lincoln's young body began to change. The juices and glands began to make a long, tall boy out of him. As the months and years went by, he noticed his lean wrists getting longer, his legs too, and he was now looking over the heads of other boys. Men said, "Land o' Goshen, that boy air a-growin'!"

As he took on more length, they said he was shooting up into the air like green corn in the summer of a good corn year. So he grew. When he reached seventeen years of age, and they measured him, he was six feet, nearly four inches high, from the bottoms of his moccasins to the top of his skull. These were years he was handling the axe. Except in spring plowing-time and the fall fodder-pulling, he was handling the axe nearly all the time. The insides of his hands took on callus thick as leather. He cleared openings in the timber, cut logs and puncheons, split fire-wood, built pig pens.

He learned how to measure with his eye the half-circle swing of the axe so as to nick out the deepest possible chip from off a tree trunk. The trick of swaying his body easily on the hips so as to throw the heaviest possible weight into the blow of the axe—he learned that.

On winter mornings he wiped the frost from the axe-handle, sniffed sparkles of air into his lungs, and beat a steady cleaving of blows into a big tree—till it fell—and he sat on the main log and ate his noon dinner of corn bread and fried salt pork—and joked with the gray squirrels that frisked and peered at him from high forks of near-by walnut trees.

He learned how to make his axe flash and bite into a sugar maple or a sycamore. The outside and inside look of black walnut and black oak, hickory and jack oak, elm and white oak, sassafras, dogwood, grapevines, sumac,—he came on their secrets. He could guess close to the time of the year, to the day of the month, by the way the leaves and branches of trees looked. He sniffed the seasons.

Often he worked alone in the timbers all day long with only the sound of his own axe, or his own voice speaking to himself, or the cracking and swaying of branches in the wind, and the cries and whirs of animals, of brown and silver-gray squirrels, of partridges, hawks, crows, turkeys, sparrows, and the occasional wildcats.

The tricks and whimsies of the sky, how to read clear skies and cloudy weather, the creeping vines of ivy and wild grape, the recurrence of dogwood blossoms in spring, the ways of snow, rain, drizzle, sleet, the visitors of sky and weather coming and going hour by hour—he tried to learn their secrets, he tried to be friendly with their mystery.

So he grew, to become hard, tough, wiry. The muscle on his bones and the cords, tendons, cross waves of fiber, and nerve centers, these became instruments to obey his wishes. He found with other men he could lift his own end of a log—and more too. One of the neighbors said he was strong as three men. Another said, "He can sink an axe deeper into wood than any man I ever saw." And another, "If you heard him fellin' trees in a clearin' you would say there was three men at work by the way the trees fell."

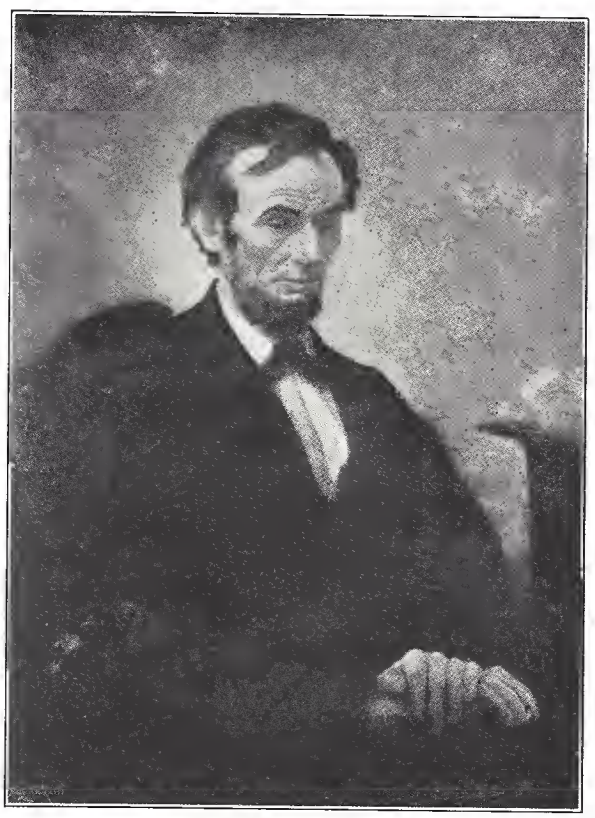
He was more than a tough, long rawboned boy. He amazed men with his man's lifting power. He put his shoulders under a new-built corn crib one day and walked away with it to where the farmers wanted it, didn't heed their poles. He played the same trick with a chicken house; at the new growing town of Gentryville near by, they said the chicken house weighed six hundred pounds, and only a big boy with a hard backbone could get under it and walk away with it.

A blacksmith shop, a grocery, and a store had started up on the crossroads of the Gentry farms. And one night after Abe had been helping thresh wheat on Dave Turnham's place he went with Dennis Hanks, John Johnston, and some other boys to Gentryville where the farmhands sat around with John Baldwin, the blacksmith, and Jones, the storekeeper, passing the whisky jug, told stories and talked politics and religion and gossip. Going home late that night, they saw something in a mud-puddle alongside the road. They stepped over to see whether it was a man or a hog. It was a man—drunk—snoring—sleeping off his drunk—on a frosty night outdoors in a cold wind.

They shook him by the shoulders, doubled his knees to his stomach, but he went on sleeping, snoring. The cold wind was getting colder. The other boys said they were going home, and they went away leaving Abe alone with the snoring sleeper in the mud-puddle. Abe stepped into the mud, reached arms around the man, slung him over his shoulders, carried him to Dennis Hank's cabin, built a fire, rubbed him warm and left him sleeping off the whisky.

And the man afterwards said Abe saved his life. He told John Hanks, "It was mighty clever of Abe to tote me to a warm fire that night."

So he grew, living in that Pigeon Creek cabin for a home, sleeping in the loft, climbing up at night to a bed just under the roof where sometimes the snow and rain



LINCOLN ALWAYS PRESENT

"America does not realize how much she owes to the fact that Lincoln is still a living presence on the Capitol Hill, unavoidable even if it is not sought."

—From "The Art of Thinking" by Ernest Dimnet.

drove through the cracks, eating sometimes at a table where the family had only one thing to eat—potatoes. Once at the table when there was only potatoes, his father spoke a blessing to the Lord for potatoes; the boy murmured: "Those are mighty poor blessings." And Abe made jokes once when company came and Sally Bush Lincoln brought out raw potatoes, gave the visitors a knife apiece, and they all peeled raw potatoes, and talked about the crops, politics, religion, gossip.

Days when they only had potatoes to eat didn't come often. Other days in the year they had "yaller-legged chickens" with gravy, and corn dodgers with shortening, and berries and honey. They tasted of bear meat, deer, coon, quail, grouse, prairie turkey, catfish, bass, perch.

Abe knew that sleep which comes after long hours of work outdoors, the feeling of simple food changing into blood and muscle as he worked in those young years clearing timberland for pasture and corn crops, cutting loose the brush, piling it and burning it, splitting rails, pulling the cross-cut saw and whipsaw, driving the shovel-plow, harrowing, planting, hoeing, pulling fodder, milking cows, churning butter, helping neighbors at house-raisings, log-rollings, corn huskings.

He found he was fast, strong and keen when he went against other boys in sports. On farms where he worked, he held his own at scuffling, knocking off hats, wrestling. The time came when around Gentryville and Spencer County he was known as the best "rassler" of all, the champion. In jumping, footracing, throwing the maul, pitching the crowbar he carried away the decisions against the lads of his own age always, and usually won against those older than himself.

He earned his board, clothes, and lodging, sometimes working for a neighbor farmer.

The farmers called him to butcher for them at thirty-one cents a day, this when he was sixteen and seventeen years old. He could "knock a beef in the head," swing a maul and hit a cow between the eyes, skin the hide, halve and quarter it, carve out the tallow, the steaks, kidneys, liver.

And the hiding places of fresh spring water under the earth crust had to be in his thoughts; he helped at well-digging; the wells Tom Lincoln dug went dry one year after another; neighbors said Tom was always digging a well and had his land "honeycombed;" and the boy, Abe, ran errands and held the tools for the well digging.

When he was eighteen years old, he could take an axe at the end of the handle and hold it out in a straight, horizontal line, easy and steady—he had strong shoulder muscles and steady wrists early in life. He walked thirty-four miles in one day, just on an errand, to please himself, to hear a lawyer make a speech.

Growing from boy to man he was alone a good deal of the time. Days came often when he was by himself all the time, except at breakfast and supper hours in the cabin home.

He lived with trees, with the bush wet with shining raindrops, with the burning bush of autumn, with the lone wild duck riding a north wind and crying down on a line north to south, the faces of open sky and weather, the axe which is an individual one-man instrument, these he had for companions, books, friends, talkers, chums of his endless changing soliloquies.

His moccasin feet in the wintertime knew the white spaces of snowdrifts piled in whimsical shapes against timber slopes or blown in levels across the field's of last year's cut corn stalks; in the summertime his bare feet toughened in the gravel of green streams while he laughed back to the chatter of blue jays in the red bow trees or while he kept his eyes ready in the slough quack-grass for the cow-snake, the rattler, the copperhead.

He rested between spells of work in the springtime when the upward push of the coming out of the new grass can be heard, and in autumn weeks when the rustle of a single falling leaf lets go a whisper that a listening ear can catch.

He found his life thrown in ways where there was a certain chance for a certain growth. **And so he grew. Silence** found him; **he met silence.** In the making of him as he was, the element of silence was immense.

"Why the Chimes Rang"

By Mrs. Harry Lawrence

THE Christmas Cantata which the children of the Reliance school gave, under the direction of Mr. Harrison Busby, Superintendent of Schools, has to do with a Christmas legend told and firmly believed by the folk of a small English hamlet.

The legend runs that, on Christmas Eve when all, rich and poor alike, are offering up their thanks and gifts to the Christ Child, our Lord looks down upon them searching for the one perfect gift, a gift of love and self-sacrifice and that upon finding it the chimes in the nearby Cathedral will ring out.

But in all these many years the chimes have been silent. The scene is laid in a woodsman's cottage on the edge of town where live the Woodman, his wife and two small sons, "Steen" and "Holger."

Both small lads have long been promised a visit to the Cathedral on Christmas Eve and have looked forward to the time longingly when they would go. A grandmother's illness calls both father and mother to her bedside and it looks as though Steen and Holger were doomed to disappointment. Gloom reigns in the small cottage, both small faces are pressed hard against the window pane, gazing toward the crowds flocking to the Cathedral, when Holger sees a poor old woman kneeling in the snow, praying. Both boys are awed and a bit afraid.

Just then a knock is heard and thinking it to be the old woman, they fearfully open the door. What to their joy do they find but their jovial uncle Bertel come to take them to the Cathedral after all.

Then comes the question, What gifts have they to offer? None it seems, 'til Holger displays two bright pennies earned and hoarded to buy cakes. Steen remonstrates with Holger, he sorely wants those goodies, but Holger's self-sacrificing soul bids him offer his pennies to the Christ Child.

A stir makes them glance around to see the old woman, whom they had seen from the window, cowering and shivering at their own fireside. Holger asks her who she is and what he may do for her, she replies that she wants refuge from the storm. His wee heart is torn between duty and pleasure. Well he knows that his mother would not turn her out, but would remain with her and keep the fires burning, but Oh! how he wants to go with Uncle Bertel and Steen and they have no patience with his indecision. But he stays behind and does his small best to make comfortable this stranger within his gates, proffering her his own portion of porridge and chaffing and rubbing her cold hands.

A wistfulness will creep in as he tells her how he had planned his pilgrimage to the Cathedral, the old woman comforts him and tells him to be of good cheer and have faith.

The scene changes and we are in a beautiful church, an ever changing procession kneels before the altar offering up

The Perfect Gift.

Christmas Trees and Christmas Carols were everywhere.—Reliance School Boy Choir.

their gifts to the Christ Child. We see the courtier offering a casket of rare jewels, a richly clad woman holds up her necklace of priceless pearls, a scholar brings his choicest book, a young girl holds up a sheaf of lilies, a poor miser tenders some of his gold, a king kneels before the altar holding up his crown—still the chimes are silent.

Holger has viewed all this, thinking each gift would be the "gift perfect." He is over-whelmed with disappointment and asks that he might give his two pennies. The old woman in a ringing voice bade him to go and offer his mite.

The Priest takes his pennies and as he does so there rings out triumphantly the peal of the chimes.

The old woman who has receded into the shadows appears now as a beautiful angel and with her face lit up with a beautiful smile chants these words: "Verily, verily I say unto you, it is not gold or silver nor rich pearls but love and self-sacrifice that please the Lord. The Christ Child was hungered and you gave Him meat, a stranger and you took Him in."

There is a pause, the hearth fire flares up revealing the small boy still kneeling. A bewildered look is on his young face, he turns to speak to the old woman, she is gone.

'Tis a beautiful story and the writer, from her vantage point, saw many a tear furtively brushed away as the curtain fell on the little lad who had given his all.

"Holger" was impersonated by Boyd Marshall. His small brother "Steen" was ably taken by "Chick" Gibbs.

The scenes of the play were interspersed with Christmas anthems sung by a surpliced boy choir and a chorus of angels who sang Xerxes "Largo."

A beautiful theme, beautifully given and we one and all thank Mr. Busby who prepared and gave the play and Mr. Brueggeman and his orchestra who furnished the music for an evening which will long live in our memories and which pointed out to many of us that we may be often inclined to be "Steens".

Disraeli and the Suez Canal

(Continued from page 54)

effacing Jew. The Scotsman thought only of the safety of his great bank, The Bank of London—"The old lady of Treadneedle Street," as it is called. The other man, sympathetic, perhaps with the aspirations of one of his own race, staked his all on Disraeli's plan. When all seemed lost, the great statesman brought his transcending genius, his subtle mind, to the task of making the canny Scot take over the Jew's financial task, a situation imposed by the reported loss of the ship which was carrying Rothschild gold to London.

Ye Old Timers

Mrs. Bessie Ramsay Called Home

Mrs. Bessie Ramsay, mother of Mr. Jack Ramsay and Mrs. Charles Outsen of Rock Springs, and a pioneer of Wyoming, died at the home of another daughter, Mrs. Agnes Toon, at Deertrail, Colorado, on New Year's Eve. She had been visiting in Rock Springs after spending the summer on the Ramsay Ranch about forty miles from the city, when she attended the Scottish concert in the Old Timers Building with Mrs. Charles Outsen. Two weeks before her death she had gone to Deertrail to spend the winter with Mrs. Toon. She suffered an attack of pneumonia and passed away just before the New Year after a few days' illness.

Mrs. Ramsay was eighty years old but it was hard to realize she had attained this age because of her vitality and cheer, her interest in her friends and in happenings. She was a lovable and interesting woman, having the qualities of blended gentleness and sturdiness of the pioneer women of her race which have endeared them to all.

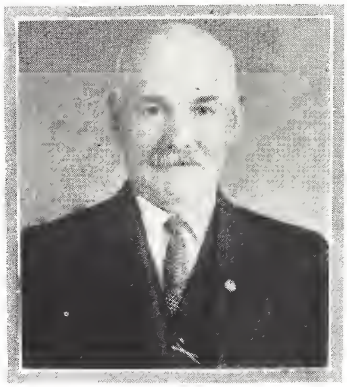
She was born in Breckenshire, Wales, in 1840 and was married there to Robert Ramsay. They lived in Wales for several years after their marriage, their older children having been born there. Mr. Ramsay came to Rock Springs in 1883 and Mrs. Ramsay followed him a few years later. She had lived in or near Rock Springs for forty-two years and was one of the most loved of the fine pioneering mothers of Wyoming.

Mrs. Ramsay is survived by ten children, five sons and five daughters; thirty-four grandchildren and twelve great-grandchildren. The daughters are, Mrs. Elmer Eulass of Chicago, Mrs. L. R. Moore, Superior, Mrs. Agnes Toon of Deertrail, Mrs. Charles Outsen and Mrs. T. A. McCormick of Rock Springs. The sons are, John, Sam, Anthony, and James of Rock Springs, and Robert of Long Beach, California. Miss Harriet Outsen, of the Store Manager's office is a granddaughter.

The funeral was held in Rock Springs, services being conducted by Reverend R. E. Abraham at the home of Mrs. Charles Outsen and at the graveside in Mountain View cemetery. Pall bearers were William and Herman Menkiney, Edmund and John Blair, David Logan and James Miller.

Death of Old Timer Robert Cox a Sad Blow to Hanna

The community of Hanna was shocked and grieved by the sudden death of Robert Cox on December 4th at the home of Mrs. Eliza While, where he was staying. Mr. Cox had not been sick previously but had been feeling as usual and had attended a social of the I. O. O. F. Lodge, of which he was a member. He had just returned home when death came.



The Late Robert Cox

Robert Cox was a member of the Old Timers' Association and was well known and liked by all, making hosts of friends by his pleasant and congenial nature. He was born in Yorkshire, England, sixty-six years ago and came to this country with his parents when but a child. He lived in Carbon a number of years where he worked in the mines, moving from there to Rock Springs. He came to Hanna in January, 1912, and has been employed here since, working in and around the mines.

Funeral services were held in Denver, Colo., on Saturday, December 7th, and interment made in Fremont Cemetery. He leaves to mourn his death seven nieces, four nephews and a host of friends.

Among those who attended the funeral of Robert Cox were two nieces, Mrs. Milly Hanson of Rock Springs, and Mrs. Geo. Harris of Green River, Mrs. Eliza While and Jack While; Mr. and Mrs. John While Sr., and Job While of Hanna; Mr. and Mrs. Joe Woods and Mr. James Buckley, of Cheyenne, and Mr. John Moody, of Hygiene, Colo.

"God's Country"

By Richard Hastings, Hanna.

IN WRITING of "Wyoming First Through Appreciation of Its Beauty," I think of the town of Elk Mountain, in Carbon County, and of it surrounding country as one of the most beautiful parts of the whole West.

Elk Mountain, at the time of the Trail Blazers, was only a flower covered valley which contained thirty or forty varieties of wild flowers, the Indian Paint Brush, our state flower, growing in profusion.

The little town of Elk Mountain nestles at the foot of the Mountains and on the banks of the Medicine Bow River. Elk Mountain is commonly known as "The Crossing," because it was at this point the Overland trail crossed the river.

Richard Hastings

On the west of the town, Elk Mountain, towering in the clouds and bright azure skies of Wyoming, rises with its peak elevated at eleven thousand feet about the sea.

In the summer the mountain ravines show plainly and at the top of one of the ravines there is a "V" shaped depression, where the timber is shaped into the likeness of one of the old pioneers that founded Elk Mountain. A constant memorial to an interesting pioneer.

During the winter a white stallion's head is always visible on the mountain. A legend has been handed down to us about a white stallion that was the leader of a large band of wild horses. This leader wintered his band on Elk Mountain. One winter his band was snowed under and starvation came upon them. The effigy of this stallion is always visible in the snows of the mountain and during the winter of 1918, the year of the great epidemic, his entire form was traced in the snow. He could be seen pictured in the snow, running across the face of the mountain with his mane and tail flying in the wind.

On the south there is the Medicine Bow River weaving its way like a giant serpent down from the Snowy Range. This river was named by the Indians—Medicine for the pure crystal-like water; Bow for the bend it takes in turning westward to join the Platte.

The Snowy Range is known to many as one of the scenic grandeurs of America. Here the snow-fed lakes lie in their serene beauty just as the Maker left them; and pines with their tall stately beauty covering the landscape with a dark beautiful green, extend their limbs heavenward.

Elk Mountain, Wyoming.

Looking toward the east we can see Laramie Peak with its long sloping foothills and its plains extending to the base of Elk Mountain, the plains broken now and then by a little rivulet or a large hill sloping in unison with the landscape.

On the north is the Seminole Range known to many as the "Bow Breaks" so named for their ruggedness. At a distance they look like monuments dedicated to the God of the beautiful things of nature. This range divides two of the old path-breakers' trails, the Overland being on the south and the Oregon on the north.

One of the Lakes near Elk Mountain that is worthy of its traditional name is Bloody Lake. It was during the time of Fort Hallack when the wood trains were going to and from Percy Springs, that Mr. Sublet, one of our noted pioneers, was taking wood for the trains at Percy. As he topped a hill he discovered Indians massacring a band of settlers. He immediately turned back to the fort and summoned the aid of the soldiers who went to the scene. But the soldiers found only the bodies of the settlers who had been killed and their bodies along with those of the oxen and horses had been thrown into a nearby lake. The blood from the bodies had given the lake a reddish hue, thus the name, "Bloody Lake."

It was a few years later that the Fort was abandoned and the ranchers began to take a pioneer hold on the fertile valley. The town of Elk Mountain was then established.

It may be "a privilege to live" in other states, but it is a real joy to live in Wyoming, and we place Wyoming First Through Appreciation of its Beauty.

Of Interest to Women

Preparations of a Sick Room at Home

By Marie Bestul R. N.

HOW to get a loved daughter, son, husband or sister back to health as quickly as may be is the worry of mothers and home makers when sickness comes. But seldom do mothers realize that the physical environment of her sick child is of vital importance to his recovery. And the longer the period of illness the more important do the surroundings become. Often there is some small trivial change that is necessary. Again, the room may need a general renovation. Shall we discuss for a moment an ideal sick room? Then we shall have a model from which to work.

The choice of the room itself is important. Sunshine, one of nature's best healers, is important. An east or south room is therefore best. The room should be quiet, near the bathroom if possible and removed from the kitchen from which the odor of cooking and noise of meal preparation adds to the patient's discomfort. Every sick person needs a room to himself. Had this room previously been occupied by another, all unnecessary furniture, clothing and bric-a-brac should be removed.

Miss Marie Bestul, Instructor in Home Hygiene and Home Care of the Sick.

The furnishings left should be simple, easy to clean, neatly arranged and in order. A single or three-quarter size bed is best, made preferably of enameled iron. However, of course, a choice is not always possible and the patient's own must be used. But any bed may be elevated on bed blocks, making the care of the sick person easier. A bed-side table is necessary and is for the use of the patient himself. It should be placed near enough for his convenience and contain such things as a glass with drinking water, a book or magazine, comb, brush, nail file and watch. Medicine bottles do not belong here. They are kept on the dressing table or on another table, away from the bed. One or two straight-back chairs for the visitor's or patient's later use, are needed. Heavy draperies at the window are taken down and clean white curtains hung in their place.

A large rug collects dust and should be removed. One or two small rugs should be substituted. A small table lamp well shaded is important. A bright light or a ceiling light annoy and tire a patient easily. If the attendant must sleep in the room a cot or small couch should be brought in. Pictures may or need not be removed, according to their type. Too many pictures collect dust and may prove an irritation. Perhaps it is best to remove them all until the patient has recovered.

A sick person needs fresh air, day and night. Draughts must, however, be avoided. A screen placed between the bed and window is a help. Sometimes a screen is not available and some arrangement must be improvised. A window board, a cloth tacked over the opening of a window or a sheet stretched along the side of the bed and fastened at the head and foot will insure good ventilation and prevent direct draughts.

The sick room must be kept thoroughly clean and in order at all times. Used dishes, soiled linen and newspapers must be removed immedately after their use. Cleaning should be accomplished with as little dust as possible. Floors, windows and furniture can be cleaned with damp dust cloths, (water or oil). Rugs should be removed for cleaning.

Every detail in a sick room's preparation will either add to or subtract from the sick person's comfort. His surroundings should contribute to his mental and physical well-being. A good attendant will not only take the doctor's orders and follow them explicitly but will do all in her power to make all surrounding factors restful, hygienic and comfortable for her patient. Reference: "Home Hygiene and Care of the Sick," by Jane A. Delano.

Books For Children

From a paper, "Books For All the Family" read by Miss Janet Riggs of Rock Springs' High School Staff at Rock Springs' Woman's Club.

I SHALL try to discuss in this paper not so much the books that ought to be in your homes as the books that may be read easily in the home and that may be used to bring the family together. Incidentally I am afraid I have recommended a good many books—a thing that I do not often do. You know we teachers are so often criticized for giving people the books we think they ought to read regardless of what they want or are capable of reading. However we are rapidly recovering from this false attitude and are basing our recommendations for reading more and more on likes and dislikes and ability as well as sterling worth of the book. There's no easier way to alienate the excellent desires of your family to discuss with you what they are reading than to tell them outright what will be good for them to read. They all of them want to discover things for themselves.

A little monograph written by Miss Plummer tells us that the seven joys of reading are familiarity, surprise, sympathy, appreciation, expansion, shock and revelation. You may readily see from this that in order to realize these joys, one must possess that much discussed quality, catholicity of taste. In plain words one must read all kinds of literature. Unless the directing genius of the home has this catholic taste I am very sure that books will not prove helpful in bringing the family together. There is no age too young to begin the development of this diversified taste in reading, and for this reason my first appeal to you is a negative one—that you try to discourage the sets of books, all of which are alike. Not because these books are bad, for some of them are very good, but because they tend to develop a taste for only one kind of book.

I hope that you will not consider me too hopelessly Victorian when I say that the best source of literature for the whole family is the Bible. You find everything there from philosophy to sex; from the lyric to the myth. However, it is such an interminable task to separate the useable material from the unuseable material that I doubt that most busy club women will have time to do this. Then, too, many of this generation have a more or less subconscious complex against the Bible through having had forced down our throats the parts that tell us to be good. This disqualifies us for making others enjoy it.

We have made great strides recently in the matter of childrens' books. You know that there were no children's books until in the eighteenth century. The first ones were devoted entirely to that unfortunate theory that if you are good you'll get the candy. Now we present a story and let the child himself have the joy of discovering the beautiful and useful truths of life. And they do discover them. For the small child there is first of all the picture-book. You know that the alphabet book is falling somewhat into

(Please turn to page 72)

Our Young Women

Jewels to Suit Your Type

We most never do discuss clothes and such things on this page. We are so far away from the places where fashion changes are first recorded and where fashion changes are first worn—and perhaps discarded. But this month we should like to talk a little about this sneaking fancy we all have for adornment. There was a day when, if we longed for jewels, we simply had to banish our longing to the realms of "can't haves" or "when we are grown up." But now we may visit the shops displaying novelty jewelry and be cheered by the amazing variety offered for our choice. The pieces are not cheap imitations of the real thing. They are "costume jewelry" and many have beauty of workmanship, coloring and design which make them extremely wearable, proving once again —that artistic achievement is not dependent upon price, rarity or age.

"Costume jewelry" is a comparatively new term and a new achievement and, artistically used, it accents a color note of a gown which formerly might have been done by trimming perhaps. As a repeating color note it is useful and pretty. The color of a gown caught up and echoed by an ornament on throat, hand or arm, can be very effective. Color should be considered even in the matter of setting .Gold is best with brown, yellow or deeply warm tones—silver with the cool colors. It is not wise to wear pieces mounted in metals that do not match.

Pearls, pearl—we find them everywhere from the cheapest imitations to the most exquisite simulation. But we do not tire of them. Used in moderation their softness is flattering. And restraint should be practiced in wearing any type of costume jewelry. Earrings, at least the pendant type, should be confined to evening wear. In the day time they are bound to make the wearer look a bit "out of the picture"—out of harmony.

A necklace more than any other piece must be selected to suit the gown. An ornament which falls at the wrong place can be utterly ruinous to a neckline. The line should conform to the line of the gown as that in turn does to the height and line of the wearer.

In wearing ornaments, as in other dressing, fitness—to the time, the gown and the individual—is the all important virtue.

Scout Betty Hanks demonstrates making a bed with the patient in it under the direction of Miss Marie Bestul, R. N., for the Senior Girl Scouts of Winton. Evelyn Jolly attends with a correctly prepared tray. The following girls and officers have received Red Cross Home Nursing Certificates: Mrs. Robert Jolly, Captain, Betty Hanks, Jessie Aguilar, Mildred Maloney, Ilene Maloney, Josephine Brack, Mary MacDonald, Kathryn Spence, Goldie Slaughter, Dolores Ellis, Linda Lehto, Muriel Crawford, Lieutenant, Dorothy Woodman, Evelyn Jolly and Arvilla Kobler.

Sharing

It has been said again and again—and it has been said by educators of note—that the one big thing Girl Scouting has given to education is the patrol system. So it is named in Girl Scout organization: Group activity! group accomplishment! I like to think of what this same patrol system teaches the individual girl—the joy of sharing. There are so many folks who do not know how to share. Nor do I mean the folks who are willing to take credit for others' accomplishments. They are quite outside, aren't they? But I mean folks who apparently mean well but are only interested in the thing they are themselves doing.

Once I saw preparations for two parties. One was in the home of a little Girl Scout Captain. A group of Girl Scouts were having a party. One brought her very own Christmas tree for a table centre. Several girls helped the Captain set the table. One girl turned the lights low while another stirred the logs in the fire place. Another girl turned the radio to a Christmas carol all wanted to hear. Three different girls played the piano for hymns and songs being practiced. Almost everyone helped remember the rolls the Captain's mother had put in the oven and had left in her charge. Every single girl helped get the party ready so every single girl felt it was her party. It was a tremendous success, a sharing success. And at the end all said, "Didn't we have a good time?"

The secret of having a good time is in having a share in making the good time. Haven't you often heard a hostess say, "He's a wonderful dinner guest." She means that he shares the party's success by giving himself to it. And she's a clever hostess if she makes an atmosphere in which he can give himself.

The second party was sometime ago. A group of girls were away from home on a holiday. They could have had a sharing day but one woman who didn't really belong to their group hadn't been taught to share. She had guests of her own who didn't belong either. She couldn't share the preparations. The other's couldn't say: "We're having a party." They would have to say: "This lady is giving a party and we're at it." If they were terrible nice they could say, "We hope they enjoy it."

Once I was on a train on Christmas Eve. The railway company planned that there should be a Christmas tree and program for the children—for everybody—on the train. The Pullman conductor had charge of it **but**—and this is just another aspect of the psychology back of sharing—he had committees of passengers arranging the details of the party. A fat salesman hunted up the program. A committee went through the train finding out the names and ages of the children. Ever so many different busy looking people stopped and told me that we were "taking **on our** tree at ————" as if they were responsible for it being so. Everybody helped get the party ready so everybody felt it was their party and enjoyed it.

Sharing fun is the secret of having fun.

A Great Woman Said

A little while ago Miss Mable Cratty died. She had been, for a number of years, the head of the National Board of Young Women's Christian Associations. She was a tremendously interesting speaker because the things she said were tremendous. One of them was advice to "keep people's minds antiseptic in regard to others by the fine use of praise."

Sugar

Librarian: (to boy under table)—What are you looking for?

Boy—I'm looking for my lollipop.

Librarian: Well, you won't find her there.

Service

Guest: I suppose I can sit here until I starve?

Waiter: Hardly that, sir! We close at eleven o'clock.

Our Little Folks

Something About Amber

From Really-So Stories

By Elizabeth Gordon and Jane Priest

MANY of you have read about the Boy Named Billy who spent a summer with Somebody in the north woods. Billy did not like make-believe stories. He liked things that were really-so; this story, "Something About Amber," is a really-so story.

"Cousin Elsa just dropped one of her biggest amber beads on the hearth and it rolled into the fire and burned up—fizz—just like that," said the boy named Billy. "It smelled like pitch and burned like it, so it couldn't have been real amber after all; it must have been made of celluloid."

"Those beautiful amber beads of Great-great-grandmother Kyle's were certainly not made of celluloid." said Somebody.

"That's so," said the boy named Billy; "there couldn't have been any celluloid then. But amber is a stone, isn't it? And stone wouldn't burn like that. My teacher told me that amber comes from the bottom of the sea. How, then, could it burn just like a pine torch?"

"Because, that is exactly what it is," said Somebody. "Your teacher is right as far as she has told you, but there is a lot more to it."

"Do tell us the rest of it!" said the boy named Billy.

"Ages upon ages ago," said Somebody, "there grew in the Baltic regions wonderful forests of immense pine trees which are the only true resin bearers. In those early days the world had not yet settled down to business, as it has. And one day along came the sea and covered up those forests, twisting and breaking the trees to pieces and liberating the resin which oozed out in great drops and went to the bottom of the sea. The wood was turned into stones and the resin was, by action of the waves and the chemicals in the water, turned into a pale golden substance which after long years rose to the surface of the water. When it was first discovered, it was thought to be ambergris and the name amber is taken from that word."

"What's ambergris?" asked the boy named Billy.

"That, as Kipling says, is another story."

Billy laughed. "Let's finish this one," said he.

"Much of the amber of commerce," said Somebody, "is cast up at ebb tide along the Baltic and North Sea coasts and the promontory of Samland. The natives wade into the water with long-handled drag-nets with which they pull in the bunches of seaweed in which are entangled the pieces of amber.

"Divers are also employed to go to the bottom of the sea to bring up fine pieces which have not

come to the top. There are also amber mines where the beautiful substance is taken from the ground. This is called 'pit amber' and if you were to find a piece you would very likely never know it for itself because it is covered by a crust which is called the matrix. This is removed by the miners by putting the pieces in a revolving barrel containing sand and water.

"It was found that when amber was polished it attracted straw and other substances. The Greeks called amber 'elektron,' and our word 'electricity' came from this."

"What other articles are made of amber besides beads and jewelry?" asked the boy named Billy.

"Amber is used to make many small articles, like the mouthpieces of pipes and cigar holders, buttons and the stems of vases; the imperfect masses of amber are dissolved in alcohol and used to make varnish for pieces of fine furniture and violins. In the pieces of amber which are found," went on Somebody, "are often perfectly preserved bugs and spiders, also perfect impressions of ferns and flowers."

"It sounds like a fairy tale," said the boy named Billy. "One can almost imagine the sea gnomes working down under the waves, century after century, to turn the trees into stone and to make the beautiful clear amber to send back to earth in payment for having taken away forests. Why, even the varnish on grandmother's old mahogany table may have been under the sea for ages and ages. I'll be pretty careful not to scratch it after this, I'll tell you. Really-so stories are most interesting, aren't they?"

"I think so," said Somebody, smiling. "And I am glad that you like them, too."

Lincoln Carried Her Trunk

"MY FIRST strong impression of Mr. Lincoln," says a lady of Springfield, "was made by one of his kind deeds. I was going with a little friend for my first trip alone on the railroad cars. It was an epoch of my life. I had planned for it and dreamed of it for weeks. The day I was to go came, but as the hour of the train approached, the hackman, through some neglect, failed to call for my trunk. As the minutes went on, I realized, in a panic of grief, that I should miss the train. I was standing by the gate, my hat and gloves on, sobbing as if my heart would break, when Mr. Lincoln came by.

" 'Why what's the matter?' he asked, and I poured out all my story.

" 'How big's the trunk? There's still time, if it isn't too big.' And he pushed through the gate and up to the door. My mother and I took him up to my room, where my little old-fashined trunk stood, locked and tied. 'Oh, ho,' he cried, 'wipe your eyes and come on quick.' And before I knew what he was going to do, he had shouldered the trunk, was down stairs, and striding out of the yard. Down the street he went, fast as his long legs could carry him, I trotting behind, drying my tears as I went. We reached the station in time. Mr. Lincoln put me on the train, kissed me goodbye, and told me to have a good time. It was just like him."

Cold Comfort

Said a Gargoyle on a gable
With a gurgle
To a Griffon,
"I'm continually snifflin'
With a cold.
Will you tell me if you're able
(I am longing to be told),
Where I might beg, buy or burgle
Some good antiseptic gargle,
Yes, a gargle for a gargoyle
With a cold?"

Said the Gargoyle on the gable,
With a sniffle and a snuffle,
"Though I'm just a beast of fable
And I'm ugly to behold,
Yet I'm sneezy and I'm wheezy
With a cough I cannot muffle,
And my breath comes with a guggle
As I struggle
With a cold;

"Can't you guide me to a gargle
Which a gargoyle might be sold?
Such a gargle as a gargoyle
Could gustiferously guzzle
By the bottle
In his throttle,
And could snozzle
In his nozzle
And his larynx and his pharynx
And aesophagus and nuzzle
To relieve this soggy, foggy,
Sort of cold?"

But the Griffon gave a giggle
(An unsympathetic griffon)
And he said, "There ain't no swiggle
To be got for gear or gold.
No there ain't no giddy gargle
For a gargoyle with a cold!"

So the Gargoyle
Goes on snifflin'
As of old;
Though he's grumpy with the Griffon
And a bit inclined to scold,
He must suffer like a duffer
With a wheezy, sneezy cold
With a soggy, foggy, raspy, gaspy, muggy, fuggy cold
With a gaggly, naggly snuffy, stuffy, puffy sort of cold.
For the Gargoyle has no gargle
For his cold.

From "Saint Nicholas."

Manhattan Marionettes For Children's Concert on February 8th

DID you ever see a boy or girl eat all around a choice dessert, leaving the icing or the decorating cherry for the very last bite? "The best for the last!" That's exactly what the planner of our children's concerts has done—left the best for the last.

On Saturday afternoon, February 8th, at 2:30 we will have the next of the series of concerts arranged by Mr. McAuliffe for all you young folks. And we're ever, ever so glad that you are to have the pleasure of knowing a real show of "dolls that live." The dolls will play on their stage some of the fairy stories we've known; and new ones. There will be sketches from Anatole France, Dickens and Shaw. It's the funniest thing in the world to see the dolls dance and play and act. At the end we are to be shown how they work and the hundreds of strings that operate them. And some of us are sure to make tiny marionettes. Its perfectly possible and heaps of fun.

Fun and fascination for our next concert! A program of highest artistry and exquisite charm. We're ever, ever so glad it is to be a marionette show. Every boy and girl ought to see one.

News About All of Us

Rock Springs

Mr. and Mrs. Joseph Iredale have returned from Idaho Falls, Idaho, where they spent the holidays with their daughter, Mrs. Fred Carlson.

Dave Miller and family have returned from Lethbridge, B. C., where they spent the past six months. They will again make Rock Springs their home.

R. J. Scholl and family, of Hanna, spent Christmas here with Mrs. Scholl's parents, Mr. and Mrs. T. H. Butler.

Mr. and Mrs. Jake McDonald have returned from Salt Lake City where they visited with Mrs. McDonald's parents, Mr. and Mrs. James Overy.

John Freeman has been confined to his home the past week with an attack of flu.

Mr. and Mrs. E. A. Olson entertained at a card party Christmas night at their home on Eleventh Street.

Harry George has returned to his home in Denver after having visited with his grandparents, Mr. and Mrs. Thos. J. Whalen.

Mrs. Ben Caine, of Superior, has been visiting relatives here.

John Soltis has been confined to his home with an attack of flu.

Mr. and Mrs. T. J. O'Farrell are the proud parents of a baby daughter born at their home on Christmas Day.

Mrs. E. A. Priesthoff is visiting with relatives in Cheyenne.

Mr. and Mrs. Myrtle Crofts have returned from Colorado Springs, Colorado, where they visited with relatives.

Mrs. Wm. Davis has moved into the new home she recently erected on Young Avenue.

Mrs. Wm. Gunther, of Winton, is visiting here with her parents, Mr. and Mrs. William Card.

Wm. R. Lee has returned to Laramie after having spent the holidays here with his parents, Mr. and Mrs. W. K. Lee.

Robert Outsen, who is teaching school at Manderson, Wyoming, spent the holidays here with his parents, Mr. and Mrs. Chas. Outsen.

James Whalen and family have moved back to Rock Springs from Hudson, Wyoming. Mr. Whalen has accepted a position in No. 8 Mine.

The sympathy of the entire community is extended to Mr. and Mrs. Alfred Robertson, Sr., in the loss of their young daughter whose death occurred on Monday, January 6th, from spinal meningitis.

Harry L. Cook has returned from a business visit in Cheyenne.

Mr. and Mrs. Morgan Roberts entertained at a party at their home on Pilot Butte Avenue on New Year's eve.

Dan D. Potter was called to Idaho on Monday, January 6th, by the death of his father. The sympathy of the entire community is extended to Mr. Potter.

Superior

Mr. and Mrs. Mathew Morrow are being congratulated on the arrival of a baby daughter, born in late December.

Jack Moore spent Christmas with his parents in Cumberland.

Mr. and Mrs. Charles Morgan visited in Evanston for the Christmas holidays. Plenty of turkey up there, too, say the Morgans.

Miss Vella Wylam is a versatile school teacher. She can also sell any sort of Christmas present, household necessity, bridge prize or what will you have.

Mrs. A. Pandalis has quite recovered from her illness following an operation performed at Wyoming General Hospital.

Officers of the Superior Union Sunday School elected for the coming year are: Superintendent, J. H. Haueter; Assistant Superintendent, Mrs. A. Leslie; Secretary-Treasurer, A. Leslie; Librarian, Miss Bessie Hanking; Pianist, Miss Lillian Williams.

Miss Rena Profaizer of Ogden is visiting her sister, Mrs. Ted Hiner.

Mr. and Mrs. George Doza have a new baby daughter.

A new baby girl has also come to the home of Mr. and Mrs. Nick Sutler.

Winton

Frank Stortz, Unit Foreman No. 3 Mine, is ill and confined to his home.

George Bird, Allan Kenyon, Percy Groutage and Mary Foster spent the holidays at home before returning to the University at Laramie.

Mr. and Mrs. M. E. Dains and family have moved to Winton.

Mr. and Mrs. Mahoney are the proud parents of an eight pound boy.

Mrs. LeRoy T. Jones arrived recently from Iowa, to join her husband here. Mr. Jones is the Resident Engineer.

Until there's a greater name than EDISON
---there'll never be a greater RADIO!
CHIPP'S, 607 No. Front St., Rock Springs

A dance was held at the Amusement Hall on New Year's Eve and all Winton danced the New Year in.

Mrs. Evanoff, Harry Purdy and T. Yamamoto are in the Hospital, Mrs. Anderson is at home, but still on the sick list.

Bill Hudson spent New Year's Day with his parents in Hanna.

Roy C. Anderson has left Winton for a teaching position in Hugo, Colorado.

Cumberland

Richard Dexter, Jr., of Los Angeles, California, has returned home to spend the Holidays with his parents.

A daughter was born to Mr. and Mrs. John Lyartis on New Year's Eve, at Salt Lake City, Utah.

Mr. and Mrs. R. Wilcox are visiting at the home of Mr. and Mrs. John T. Welsh.

Mrs. Axel Johnson, Mrs. Walter Johnson, Howard Johnson and Howard Bartley spent New Year's Day at Salt Lake City, Utah.

Mrs. Spencer Williams is visiting with her daughters, Mrs. Dick and Mrs. Sam Dexter.

Frank Peternell has returned to Laramie, where he is attending the University of Wyoming.

Mitchell Boam of Ogden has been visiting with Tommy Dodds.

Mrs. James Kallas has been hostess to the sewing club.

Mr. and Mrs. Charlie Clark and family have moved to Grass Creek, Utah.

Supt. and Mrs. R. C. Travis have returned from a trip to Blackfoot, Idaho.

A few of the Sunday School girls gave a surprise party for their former teacher, Miss Ann Edwards, when everybody had a good time.

Hanna

The cooking class of the High School entertained the members of the School Board and the High School faculty at a banquet in the Domestic Science rooms.

Among our young people who are away teaching or attending school and who spent the holidays with relatives here are, Miss Lena Erickson, Muriel Crawford, Edna Klaseen, Dorothy Milliken, Anna Annala, Lucille Love, Almo Williams, Leth Fearn, Grace Louise Williamson, Margaret McClelland, Annie and Alice Hodgson, and Messrs. Wm. Clegg, Kenith Briggs, Lester Allison, and Charles Stebner.

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Utah Idaho
Wyoming California Nevada

Schramm-Johnson Drugs

A Unit of Walgreen Company

DRUGS, KODAKS, STATIONERY AND SUNDRIES

Prescriptions Carefully Compounded

ROCK SPRINGS, WYO.

First Security Bank
of Rock Springs

Rock Springs, Wyoming

CONDENSED STATEMENT OF CONDITION
DECEMBER 31, 1929

RESOURCES

Loans and Discounts		$ 1,082,712.79
Banking House, Furniture and Fixtures		127,327.77
Other Real Estate		47,500.00
Other Assets		2,247.75
Cash and Due from Banks	542,981.76	
U. S., Municipal and Listed Securities	538,012.82	
TOTAL CASH RESOURCES		**1,080,994.58**
Total Resources		$ 2,340,782.89

LIABILITIES

Capital	$ 100,000.00
Surplus	100,000.00
Profits and Reserves	87,566.84
DEPOSITS	**2,053,216.05**
Total Liabilities	$ 2,340,782.89

LOCAL DIRECTORS AND OFFICERS

John Mrak — Glenn D. Wilson
J. H. Brooks — B. J. Carollo
William Chilton — H. T. Buor

Successful banking is founded on two simple, fundamental principles; namely—CONFIDENCE AND SAFETY. That these principles are held inviolate by the FIRST SECURITY CORPORATION SYSTEM OF BANKS is evidenced by these statements. Such strength and progress can only be attained by adhering to these principles, together with the desire and facilities to render unequalled service to the INTERMOUNTAIN COUNTRY.

CONSOLIDATED STATEMENT of

First Security Corporation
System of Banks

DECEMBER 31, 1929

RESOURCES

Loans and Discounts		$24,191,115.91
Banking House, Furniture and Fixtures		1,000,994.15
Other Real Estate		253,334.71
Other Securities		892,221.20
Bonds Securing Circulation		500,000.00
5% Redemption Fund		25,000.00
Customers' Liability vs Letters of Credit		2,990.00
Other Assets		28,935.21
Cash and Due from Banks	$12,700,696.87	
Call Money, U. S. Municipal and Listed Securities	11,467,367.69	
TOTAL CASH RESOURCES		**24,168,064.56**
Total Resources		**$51,062,655.74**

LIABILITIES

Capital	$ 2,386,000.00
Surplus	929,000.09
Profits and Reserves	1,700,744.07
Bank Currency in Circulation	500,000.00
Customers' Letters of Credit	2,990.00
DEPOSITS	**45,543,921.67**
Total Liabilities	$51,062,655.74

May 9, 1928	$24,566,684.10
June 30, 1928	25,206,461.20
Dec. 31, 1928	35,283,722.75
Mar. 27, 1929	40,655,036.21
June 29, 1929	42,403,383.01
Oct. 4, 1929	43,402,991.38
Dec. 31, 1929	45,543,921.67

Mr. and Mrs. J. R. Mann and daughters, Sylvia and Jean, of Winton spent the holidays here as the house guests of Mr. and Mrs. O. G. Sharrer.

The Pythian Sisters had a Christmas tree and exchanged gifts at the Lodge Hall on December 23rd. Delicious refreshments were served.

Miss Mamie Wakkuri who is working in Rawlins spent Christmas with her parents here.

Mrs. Alfred Pollari spent the holidays visiting her daughters Fanny Malmberg and Mrs. Jean Corrigan in Los Angeles, California.

Sylvester Huhtala of Alhambra, California, spent a two weeks' vacation here with his mother.

Mrs. Andrew Spence of Winton spent the holidays here with her mother, Mrs. Ida Huhtala.

Rev. and Mrs. A. Peckenbaugh and daughter, Buehla, motored to Casper and spent Christmas with relatives.

Alex Clark returned from Lava Hot Springs where he was called by the illness of his father.

John While had the misfortune of injuring his foot while at work in No. 2 Mine.

Mark Jackson motored to Casper where he took Willetta and Robert Warburton to visit their mother, Mrs. L. C. Hurt, for Christmas.

Mr. E. R. Henningsen is spending a two weeks' vacation visiting his mother at Oakland, California.

The Knights of Pythias of Hanna and Rawlins, and the Pythian Sisters of Hanna held joint installation of officers at the Finn Hall on January 3rd. Mrs. Eliza While was the installing officer for the Pythian Sisters and Mr. J. H. Giroux, Grand Chancellor of the Domain of Wyoming, installed the Knights. After the installation a delicious lunch was served, followed by dancing.

Tono

Mr. and Mrs. J. W. Potts of Seattle spent the Christmas holidays with Mr. and Mrs. Ben Dowell.

Among those whe spent the Christmas holidays in Seattle were Mr. and Mrs. William Hales, Donald and William Hales and Miss Ellen Nelson.

Miss Bernice Edwards of Olympia has been visiting her parents here.

Mr. and Mrs. Robert Murray and Miss Jean Murray spent Christmas Day at Hood's Canal with Mr. and Mrs. Pete Olsen.

Mrs. E. S. Brooks of Seattle spent Christmas Day in Tono, the guest of Mr. and Mrs. Ben Dowell and Mr. and Mrs. John Isaacson.

Mr. George Barber of South Prairie visited his two brothers here during the holidays.

Mr. Charles Friend has been confined to his home with a severe cold.

Tono has received announcements of the marriage in Seattle of a former Tono girl, Miss Edith Barber.

Mrs. Frances Flani has announced the engagement of her daughter, Celia, to Mr. Robert Vernon of Centralia. No definite date has been set for their marriage.

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T. C. CHIDESTER, Prop.
"COURTESY AND SERVICE"
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"TWO STORES"
744 Pilot Butte Ave. Phone 325
No. Front & K Sts. Phone 234
ROCK SPRINGS, WYO.

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Swift and Morrell Products

Lard	*Lunch Meat--All Kinds*
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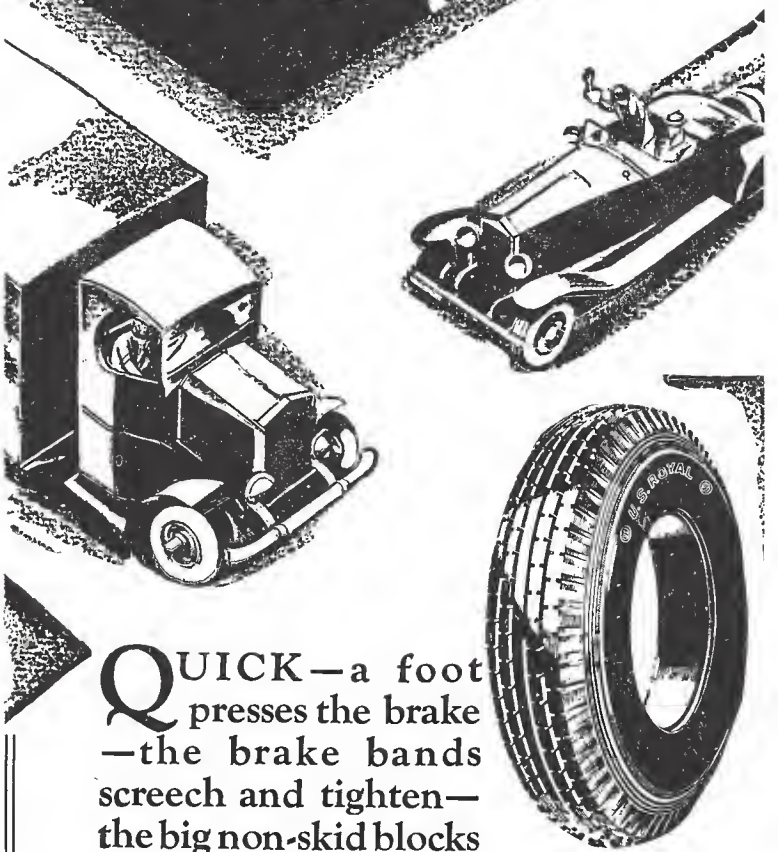
CORN FED BEEF, PORK, MUTTON, VEAL, CHICKENS, FISH
FRESH VEGETABLES---All Varieties.

WASHINGTON UNION COAL COMPANY STORE
TONO, WASHINGTON

Surer Braking



QUICK—a foot presses the brake—the brake bands screech and tighten—the big non-skid blocks on the U. S. Royals take hold of the road—the car comes to a dead stop—with space to spare.

U. S. Royal tread blocks are deep-shouldered and sharply cut. They are strong and rugged. They have braking power as long as the tire can be used.

No skidding with U. S. Royals. Visit us and equip your car today.

U. S. ROYALS

The Modern Tires for the Modern Car

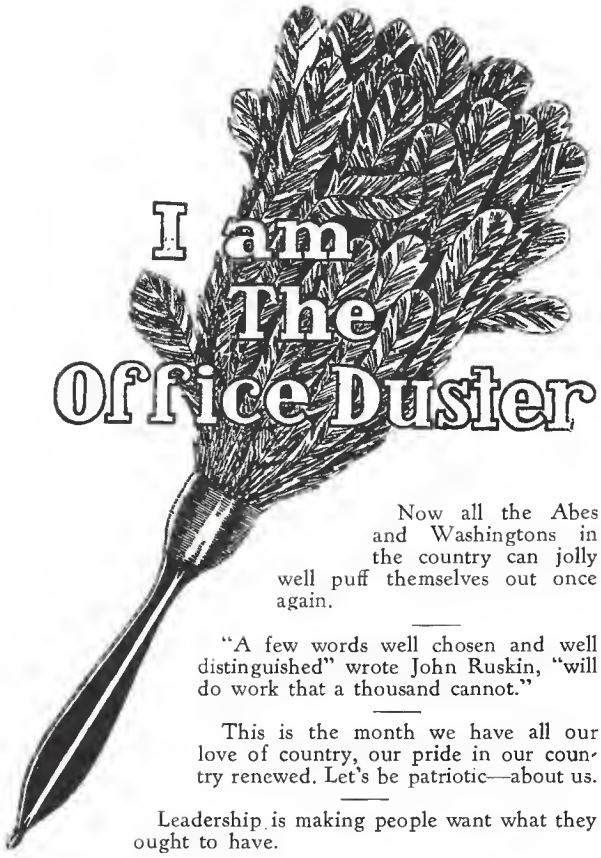
Best values in Tires and Tubes

Made by

THE LARGEST RUBBER MANUFACTURER IN THE COUNTRY

Sold by

THE UNION PACIFIC COAL COMPANY STORES



Now all the Abes and Washingtons in the country can jolly well puff themselves out once again.

"A few words well chosen and well distinguished" wrote John Ruskin, "will do work that a thousand cannot."

This is the month we have all our love of country, our pride in our country renewed. Let's be patriotic—about us.

Leadership is making people want what they ought to have.

If you sift the wheat of all our organizations' activities from the chaff of talk about numbers or technique, of action or ceremony you'll find that what we really seek in all our activity is a philosophy of life, a way of living that includes one relationship to our fellows.

I met Scotty on the street the other day and he was telling me about the new fashions—they aren't so very new—in women's dresses. Scotty likes them. "There's aye thing," said he, "I'm glad aboot in connection wi' the new fashions in wimen's dresses. Since they've gotten longer I've lost the feelin' o' bein' related to every lass I met when I wes wearin' ma kilts."

Arthur Anderson is afraid that Santa Claus gave his highland costume to someone else at Christmas time.

Alex Watt says he can't help it if he's handsome—or if folks say he is.

Anyone who believes that the natural Scot is not generous should have met Mr. Dave Wilson when he was taking a box of Scotch Shortbread, just arrived from Edinburg, home from the post office. No, it wasn't Burns' birthday.

Heresy doesn't do half as much mischief as hearsay does.

The world has nothing to bestow
From our ownselves our joys must flow
And that dear spot our home.

Books For Children

(Continued from page 64)

disuse just now because the primary and kindergarten teachers are teaching by sentences and words instead of by the abc method. But the Mother Goose rhymes and the animal pictures are in as high esteem as ever. For the children of from four to six years the nature books of Burgess are excellent. He has a flower, a bird, and an animal book. Children enjoy the characters, Peter Rabbit, Lightfoot the Deer, Sammy Jay, Bob White. Then there is the Velveteen Rabbit by Margery Williams, which is charmingly illustrated. Daglish has an excellent animal book called Animals in Black and White, which has very simple explanations accompanying the pictures.

Rose Fylmer has written some excellent poetry for children as well as fairy tales—if you are willing that your child shall hear fairy tales. The fairies are in a modern setting, different from the Grimm and Anderson tales. In the stories, "Mother Hubbard's Wonderful Cupboard," "Tales Told By the Gander" and "Adventures in the Old Woman's Shoe" by Maude Radford Warren and Eve Davenport, we have further episodes of the Mother Goose characters beyond those that Mother Goose gave us.

Again, for the older children, Kummer has written "The Story of Creation," "The First Days of Man" and "First Days of Knowledge" which answer so many of the questions that your children ask, such as why does fire burn? There is also an excellent collection called "Number 2, Joy Street" that contains contributions by Chesterton, Walter de la Mace, A. A. Milne, Hilaire Belloc, Hugh Walpole. All familiar names in the literature of taste. There is another Milne book out now, "The House of Pooh Corner", which is the further adventures of Christopher Robin. We grownups all love Milne, but sometimes he is a little too substle and whimsical for children and must be explained. You know that children dislike too much talking and not enough happening.

There must always be adventures in the reading of everyone, but particularly in the reading of the growing boy or girl. In this of course we have our old stand-bys, "Tom Sawyer," the Cooper novels, "Treasure Island," Daniel Boone, Joan of Arc, Robin Hood, and to these are now added the books about Lindy and aviation, that are claiming the attention of readers of all ages.

We all enjoy reading of experiences that might have been our own, children as well as adults. Besides the Penrod books of Tarkington, we have the excellent stories written by Barbur, "The Fighting Scrub" and "Follow the Ball," and Owen Johnson's school stories, "The Prodigious Hickey," "The Tennessee Shad" and "Skippy Bedelle." "Goin' On Fourteen" by Irvin Cobb is another excellent mirror of boy life. Albert Payson Terhune writes splendid stories of dog life. A late one that is good is "The Heart of a Dog."

History is a difficult type of reading except for the veteran. But Sidney Dark has written three, one on Scotland, one on England and one on France that the young people seem really to enjoy.

You are all familiar with the Everyman's Library. An everychild library was started a few years ago. It is called the Beacon Hill Books-shelf, and about two years ago there were eight volumes to be had. Doubtless there are more now. These first eight volumes are "Little Women" and "Little Men" by Alcott, "The Boy Whaleman"—Tucker, "Martin Hyde," "The Duke's Messenger"—John Masefield, "What Katy Did"—Susan Coolidge, "Story of Rolf and the Vikings"—Allen French, "Nelly's Silver Mine"—Helen Hunt Jackson, "Daughter of the Rich"—Mary E. Waller.

For the high school age, I can only recommend that you place before them all types of reading and that you really know what they read. Personally, I always try to read the things that the majority of the high school pupils read. Last year they read "Bad Girl"; this year they are beginning with "The Rampant Age." I believe that, neither of these book will hurt them if read with the proper attitude that parents alone can give them. It has been my experience that High School boys and girls can read anything if they read everything. That is our task; to keep them reading all types.

GLANCE BACK

Glance back over the year 1929

Now—

What did you buy for so little that was worth so much to you as electrical service?

SOUTHERN WYOMING ELECTRIC COMPANY

ROCK SPRINGS, WYOMING

The Rock Springs National Bank

STATEMENT OF CONDITION AT THE CLOSE OF BUSINESS, DECEMBER 31, 1929

RESOURCES			LIABILITIES	
Loans and Discounts		$1,593,409.83	Capital Stock	$ 100,000.00
Banking House, Furniture and Fixtures		126,929.60	Surplus	200,000.00
Other Real Estate Owned		4,320.73	Undivided Profits	75,060.07
Cash on Hand, due from banks and U. S. Treasurer	$1,347,265.08		Circulation	89,997.50
U. S. Bonds	452,551.60			
Other Bonds and Securities	371,795.04	2,171,611.72	**DEPOSITS**	$3,431,214.31
Total		$3,896,271.88	Total	$3,896,271.88

OFFICERS

JOHN W. HAY, *President*
ROBT. D. MURPHY, *Vice-President*
W. H. GOTTSCHE, *Vice-President*
C. ELIAS, Cashier
A. WALTERS, *Asst. Cashier*
FRANK PLEMEL, *Asst. Cashier*

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of Amazingly Low Price
and

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Sensational in Value
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DODGE BROTHERS

Superlative performance—incomparable value—traditional dependability—comfort, beauty and style of an entirely new order—you are assured of these in the new Dodge Six and the new Dodge Eight in generous measure. Worthy additions to the present notable Dodge Six and Dodge Senior, these latest achievements make the current lines of Dodge Brothers cars the most comprehensive from every standpoint ever offered by Dodge Brothers.

UPHOLDING EVERY TRADITION OF DODGE DEPENDABILITY

McCurtain Motor Co.
249 C Street
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New Location
LABOR TEMPLE
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A HAPPY AND PROSPEROUS NEW YEAR

Registered Pharmacist always in charge.

Your Luncheon is Complete When You are Serving

PIES - CAKES - ROLLS
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***Wouldn't* YOU *like to say* ' ' '**

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Nothing equals Chrysler ownership. There are no motor cars so masterful, brilliant and stylish—none will give you greater satisfaction over a greater number of years.

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Storage — Oil — Gasoline
Complete Garage Service

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Building Materials and Paints
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We do everything in photography

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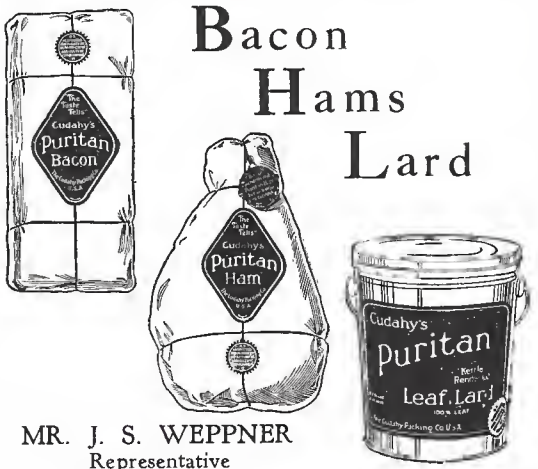

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Representative
Rock Springs, Wyoming

"The Taste Tells"
THE CUDAHY PACKING CO.
of Nebraska
NORTH SALT LAKE, UTAH

JOSEPH SCHOTT
Window Glass,
Stoves, Ranges and Kitchen Utensils
SKATES AND SLEDS
128 K Street — ROCK SPRINGS

A Full and Complete Line of WALK-OVER SHOES
135-137 K Street — Cohen's Chicago Bazaar — ROCK SPRINGS

You'll enjoy "SUPREME"

Cookies - Cakes - Crackers

—try Pilgrim Supreme Cookies, delicious new tid-bits, Supreme Salad Wafers, dainty salted wafers, Supreme honey flavored Graham Crackers and Supreme Milk Lunch Biscuits.

SUPREME THE MERCHANTS BISCUIT CO. DENVER BAKERS

On the Radio--KOA

Each Monday evening at 9 o'clock tune in

OUR SUPREME SERENADERS

THE MERCHANTS BISCUIT CO.
Denver, Colo.

For that—

PERSONAL REMEMBRANCE
a gift that will be appreciated is your

PHOTOGRAPH

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CLEANING AND PRESSING OF FINE CLOTHES SOLICITED

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First Security Bank Building ROCK SPRINGS, WYOMING

Spend all your "Spare" time
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THE PLAY-MORE

BOWLING—DANCES—SKATING

ROCK SPRINGS

EMIL BERTAGNOLLI, JULIO BELLU, Managers

PLAY SAFE!

Drain and Refill with

TEXACO

TEXACO GOLDEN MOTOR OIL flows freely when water freezes, lubricates when many oils solidify and refuse to flow. Starting a cold engine with improper lubrication always means wear. Oil-less bearings grate—dry pistons scrape and scuff. More damage is done during these first few seconds than in miles of warmed-up driving.

Free from paraffin wax and other ingredients which tend to slow up ordinary oils, Texaco starts with the motor.

THE TEXAS COMPANY

Texaco Petroleum Products

TEXACO
GOLDEN
MOTOR OIL

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Established 1921

MRS. J. S. SALMON, *Proprietor*

315 North Front Street ROCK SPRINGS

CUT FLOWERS AND PLANTS

For All Occasions

Leading Florist of the District

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